

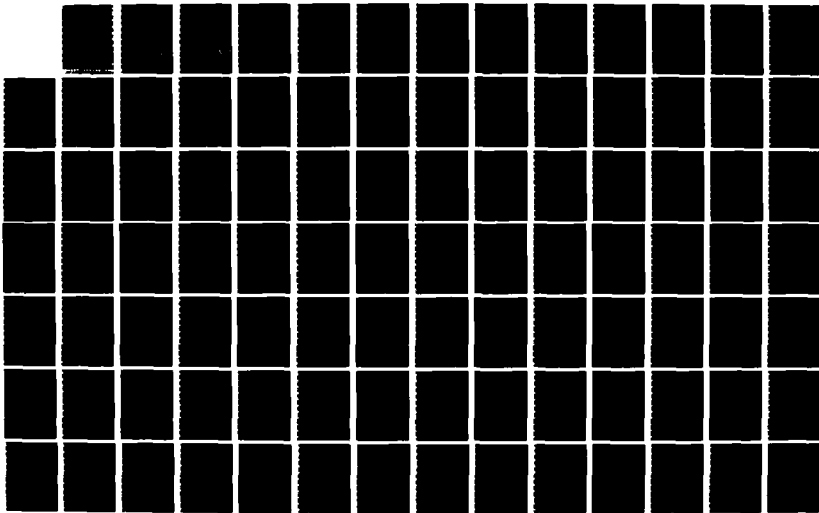
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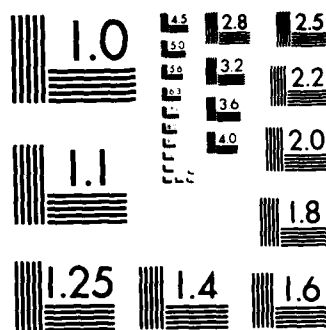
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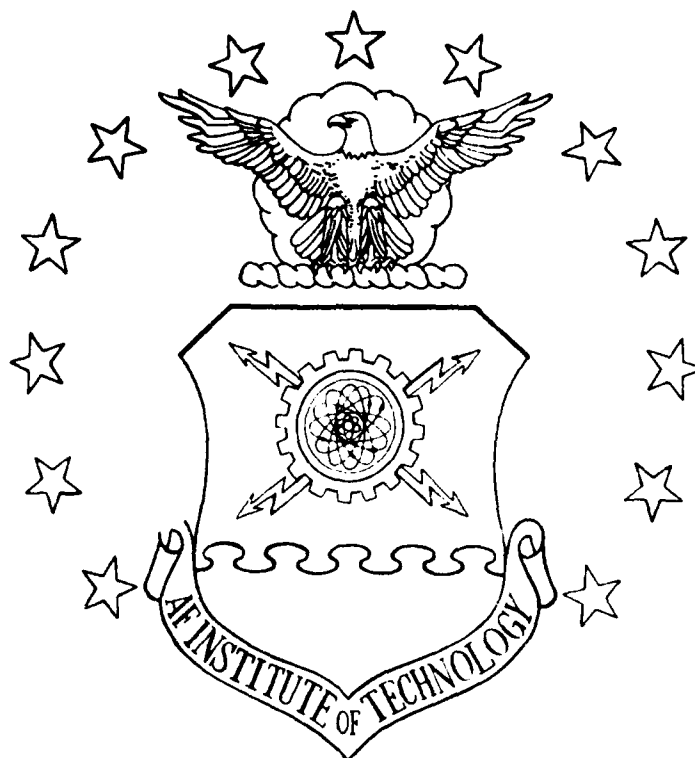
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A LONGITUDINAL INVESTIGATION OF THE  
PROCESS BY WHICH AIR FORCE ENLISTED  
PERSONNEL MONITOR AND EVALUATE THE  
CIVILIAN LABOR MARKETS PRIOR TO  
REENLISTMENT/SEPARATION DECISIONS

THESIS

Peter F. Hoene  
Captain, USAF

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AND EVALUATE THE CIVILIAN LABOR MARKETS  
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THESIS

Presented to the Faculty of the School of Systems and  
Logistics

of the Air Force Institute of Technology

Air University

In Partial Fulfillment of the

Requirements for the Degree of

Master of Science in Systems Management

Peter F. Hoene, B.S.

Captain, USAF

September 1986

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Peter F. Hoene

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### Abstract

There is a void in the empirical turnover literature regarding how the perceptions of alternatives affect the turnover process. In fact, only nine studies to date could be found that tested this relationship. Even though there is a lack of empirical literature on the subject, leading authors feel that the probability of finding an acceptable alternative is one of the key intermediate linkages between affective variables, such as job satisfaction, and turnover behavior.

This thesis continues a longitudinal study comparing the survey responses of 452 Air Force enlisted personnel, surveyed initially by Flores (1984), to reenlistment/separation data collected during May 1986. Reenlistment data were provided by the Military Personnel Center (MPC/DPMATE).

A model was developed that proposed a multivariate view of relations between perceptions of alternative forms of employment and individual's intention to undertake a search for alternative jobs, his/her intention to quit, and his/her actual reenlistment/separation decision. Six hypotheses were developed to test implications of the model. Each hypothesis was supported and several variables entered as significant predictors of reenlistment plans and behavior.

The results obtained in this study may bridge the gap in the existing turnover literature concerning the role perceived alternatives play in shaping decisions to remain in or separate from the Air Force. Further, they may guide MPC in the development of policies and procedures designed to retain qualified enlisted personnel.

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I. Introduction

Retention of quality workers is an objective of all organizations. However, the turbulent socio-economic environment in the United States, coupled with a perceived ease of intra and inter-job market movement, has resulted in employees permanently leaving organizations every few years (March and Simon, 1958).

This loss, or turnover, of employees causes disruptions in the productivity of the organization and results in direct and indirect costs such as separation pay, hiring and retraining expenses. Steel (1986) expands on these issues by describing two reasons organizations are concerned about turnover.

First, the turnover of experienced workers often requires that organizations hire inexperienced individuals to replace those that leave. The new workers must undergo a substantial learning curve effect before they become productive. This, in turn, results in lower productivity for the organization during that learning period. Secondly, turnover is expensive to the organization in terms of recruiting, selecting, relocating, training, and retraining expenses (Steel, 1986).

Mobley (1982) states that the research evidence indicates there are both positive and negative effects of turnover. Positive effects may occur when individuals leave an organization to obtain a better position, obtain additional education, or otherwise better themselves. The organization may suffer, but the individual, and society as a whole, may benefit.

However, there are many negative effects of turnover. Mobley regards the turnover expense incurred by an organization as a major negative aspect of the turnover process. He provides the following examples of turnover expense incurred by private sector organizations.

1. Gustafson estimated that the Bell System replaces in excess of 100,000 employees yearly and that the outlay for personnel replacements is unquestionably greater than \$1,000 per occurrence.
2. Mobley and Hall (1973) found that the turnover cost per 100 trainees during the first eight weeks of employment among operators in a fiber manufacturing operation was \$98,500 (lost training investment plus replacement costs) [Mobley, 1982, p. 16-17].

Assuming that recruiting, training, and replacement costs are high, this early turnover may represent negative utility for the organization; moreover, there are additional negative effects of turnover for individuals. Mobley (1982) feels that to the extent the individual leaves the job with a sense of failure and/or a sense of time wasted or opportunities forgone, early turnover may represent negative utility for the individual as well as the organization (p. 57).



This description illustrates the high dollar and personal costs of turnover to the individual and corporation. However, turnover is not unique to the corporate world.

The U.S. Air Force, like other organizations, must contend with this management problem. Given the policy of an all-volunteer force, the government cannot draft individuals with desired skills and specialties as it might during a period of conscription. It must rely on the efforts of recruiters to attract qualified volunteers and of trainers to train those individuals so that they become productive; moreover, it must also provide stimulating jobs and a quality of life that will encourage individuals to remain in the service.

Additionally, many military historians feel the Air Force is becoming less "profession" or "calling"-oriented and more occupation-oriented, and thus it is becoming more like the competitive, corporate labor market. Therefore, even if the Air Force provides satisfying opportunities to its people, Mobley (1982) suggests that,

in a free and competitive labor market, employees will periodically assess alternatives through highly-visible advertising, movement of acquaintances, and/or informal communication. Even satisfied employees expecting rewarding internal career mobility will periodically be attracted to alternatives (p. 47).

Mobley's comments are directly applicable to the all-volunteer Air Force. Since enlistees normally may opt to either reenlist or leave the service every four years, they

may not be willing to invest the amount of time necessary for an entire military career. Increasing demand for their services in the commercial world may present them with a variety of attractive alternatives.

In this situation, the Air Force provides the training ground to learn a skill or develop a specialty, and commercial organizations, by offering more money and possibly more status, may lure members from the service, thereby reaping the rewards of this employee development.

In fact, the Air Force has had a significant percentage of first term enlistees leave the service after their first tour of duty. Specifically, Flores (1984) reported that 59% of first term enlistees did not opt for another term of enlistment.

The Air Force has spent a considerable amount of money on recruiting, selecting, hiring, training and relocating first term enlistees, and if individuals choose to leave, as 59% have done in recent years, the Air Force is losing a great deal on its initial investment. Further, the Air Force must then spend more time and money to recruit, select, hire, train and relocate additional personnel to replace those that have left. These individual costs may be excessive and their cumulative impact may significantly reduce the Air Force's return on its investment.

For instance Mobley (1982) cites research by Huck and Midland (1977) which "estimated that the cost to the U.S.

Navy to produce one high school graduate reenlistment approaches \$100,000" (p. 16). This figure included expected attrition and reenlistment rates.

If the turnover costs, in dollars alone (not considering the deleterious effects on readiness, etc.), to the U.S. Air Force can be hypothesized to be roughly equivalent to the costs of the Navy, and considering 59% of first term enlistees leave the service, it follows that the Air Force is suffering major turnover related labor costs.

Therefore, in order for the Air Force to obtain a reasonable return on its investment in the development of human resources, the retention of qualified enlisted personnel is a critical objective . Additionally, retention of competent people is an absolute necessity if the United States is to win or deter a war. As Secretary of the Air Force Edward C. Aldridge Jr. stated to the Air Force News Service,

our people are our most important resource. I will make every effort to maintain the quality of life programs that enable us to recruit and retain highly qualified and highly motivated people [because these people will help the Air Force to deter or succeed in war] (Skywriter, p. 1).

This statement signifies the feelings from the top management of the Air Force that without good people, the Air Force can not accomplish its mission. Therefore, research designed to determine the factors influencing people to leave or to remain in the service will provide a better understanding of the critical factors shaping reenlistment/separation decisions.

Flores (1984) examined how Air Force enlisted personnel become aware of, process, and evaluate job alternatives which may drive decisions to stay in or leave the Air Force. She felt that additional research on her sample of Air Force enlisted personnel could provide valuable insights into the turnover process for this population. Additionally, it could fill a gap in existing literature devoted to the turnover process regarding the relations between intent to search, perceived alternatives, and turnover.

Obviously, it would be beneficial to the Air Force if the factors leading to turnover, such as behavioral intentions and the perceptions about alternative employment, could be identified and managed. Thus, the focus of this thesis will be to review the literature on the turnover process, focusing on the antecedents of turnover and the effect perceived alternatives have on employee turnover decisions. Finally, a model will be proposed and tested.

Ultimately, it is hoped that this research will assist the Air Force Department of Personnel Management in the formation of management policies and procedures dealing with the retention of Air Force enlisted personnel.

## II. Literature Review

### Objective

The objectives of this literature review are to examine the theoretical literature concerning the voluntary turnover process and evaluate empirical studies that tested perceived alternatives-behavioral intentions/turnover behavior linkages. This review will result in the development and proposal of a voluntary turnover model that bridges a gap in the turnover literature concerning the role played by perceived alternatives in the turnover process.

### Background

According to Hulin, Roznowski, and Hachiya (1985), turnover is the termination of membership in a formal organization. Therefore, turnover behavior results in employees permanently leaving the organization. Human resource management has focused on the need to attract and retain qualified individuals because of the major recruiting, training and learning curve expenses associated with this behavior.

Mobley stated that this concern alone has generated over 1000 papers on turnover behavior (Mobley, 1982). This literature has examined both voluntary and involuntary turnover. However, according to Price (1977), voluntary turnover has been studied more heavily for three reasons: (1) most turnover is voluntary, (2) theory formation is

easier when the phenomenon to be explained is homogeneous, and (3) voluntary turnover is more subject to control.

The probable role of the availability of alternative jobs in the voluntary employee turnover process has, according to Mobley, Griffeth, Hand, and Meglino (1979), been recognized since March and Simon's (1958) work. Many of the recently proposed voluntary turnover models stress the importance of the individual's perceptions of alternative employment opportunities as key intermediate linkages between affective variables, such as job satisfaction, and criterion variables, such as behavioral intentions and turnover behavior (Mobley, 1977; Price, 1977; Mobley et al., 1978; Mobley et al., 1979; Mowday, Porter, and Steers, 1982). The support for such linkages at the macro level has been overwhelming according to Hulin et al. (1985). Labor market studies have found that unemployment rates have been related to turnover rates on a geographic, industry, and time period basis. Further, these studies have found employment statistics to be highly correlated with voluntary turnover. However, studies of this linkage at the individual level of analysis have produced far less significant results.

Thus, the focus of the following literature review is to review several key turnover models and related research pertaining to two theoretical approaches to turnover. These views hold that (1) behavioral intentions are the

immediate antecedent of turnover; and (2) perceived alternatives have a strong positive effect on behavioral intentions and turnover. This literature review will concentrate on the work dealing with perceived alternatives-behavioral intention/behavior linkages at the individual, not macro level. Following this review, several key, individual-level studies that tested the perceived alternatives-intention/behavior linkage will be evaluated.

### Importance of Behavioral Intentions

Fishbein and Ajzen (1972, 1975) developed a meta-theory of the relationships between beliefs, attitudes, behavioral intentions, and behavior. This theory forms the conceptual basis for the development of voluntary turnover models, like the Mobley, Horner, and Hollingsworth (1978) model.

Of concern for this thesis effort is the establishment of the validity of a behavioral intentions-behavior linkage and whether perceived alternatives moderate, directly influence, or do not influence this relationship.

Fishbein and Ajzen (1972) define behavioral intentions as "the subject's indication or his willingness to engage in various behaviors with respect to or in the presence of a given person or object" (p. 495). Additionally, they state that "a given intention, will, under most circumstances, be highly related to the corresponding behavior" (p. 488). By extension one might predict that the intent to quit will predict subsequent turnover.

According to Mobley (1982), the research to date on intentions to quit-stay is consistent with Fishbein and Ajzen's predictions (1972), and Hulin, Miller, and Katerberg (1979) feel that it could be one of the most important variables for predicting turnover behavior.

In a more recent review, Steel and Ovalle (1984) published a review and meta-analysis of research on the relationship between behavioral intentions and employee turnover. This effort was conducted primarily to "resolve unanswered questions concerning the role of behavioral intentions in turnover theory" (p. 674).

The results indicate that behavioral intentions "were more predictive of attrition than overall job satisfaction, satisfaction with the work itself, or organizational commitment" (p. 673).

Therefore, Steel and Ovalle's findings are consistent with theoretical work by Mobley (1977, 1982), and Mobley et al. (1979) suggesting that behavioral intentions are more predictive of turnover than attitudes about the job. Thus it is assumed that behavioral intentions provide a vital link between predictor variables such as job satisfaction and turnover. Further, it is predicted that perceived alternatives significantly moderate this relationship.

With this foundation established, several models of the turnover process will be discussed. Each model holds a view that attrition is a psychological process (Mowday, Porter,



and Steers, 1982), and an inclusion of perceived alternatives, or opportunity, as a significant predictor of behavioral intent and/or turnover.

### Turnover Models

March and Simon (1958). March and Simon's model, developed in 1958, was one of the first turnover models to reflect the effects of the economic labor market on individual choice behavior. According to Mobley (1982) the two key elements of the March and Simon (1958) turnover model are (1) perceived desirability of movement and (2) perceived ease of movement. These distinct, but interrelated components form a balance between the benefits derived by individual contributions to the organization and the subsequent willingness of an individual to leave the organization.

March and Simon considered job satisfaction and perceived possibility of intraorganizational transfer (desirability and ease of movement) critical to the individual's turnover decision due to their effect on the motivation of the individual. Thus, the greater the job satisfaction, the less the perceived desirability of movement both within and external to the organization (March and Simon, 1958; Mobley, 1982).

March and Simon described the first key variable influencing perceived desirability of movement (Figure 1), job satisfaction, as a function of the conformity of the job

to the self-image, predictability of instrumental relationships on the job, and compatibility of work requirements with the requirements of other roles.

The conformity of the job characteristics to the individual self-image is considered a function of supervisory practices, the amount of rewards offered by the organization, participation in job assignment, education, and the rate of change of status and income. For example, March and Simon state that "the greater the consistency of supervisory practices with employee independence, the less the conflict between job characteristics and individual self image" (p. 95). Thus the greater the number of the cumulative job satisfaction factors that are met, the greater the individual job satisfaction. However, March and Simon felt that job satisfaction (or dissatisfaction) may or may not be sufficient to cause an employee to remain (or leave).

March and Simon felt that the perceived ease of movement (Figure 2) for an individual was closely tied to an individual's job satisfaction (or dissatisfaction), and together they would predict the employee's turnover behavior. March and Simon hypothesize that the "perceived ease of movement for an individual depends on the availability of jobs for which he is qualified (and willing to accept) in organizations visible to him" (p. 100).

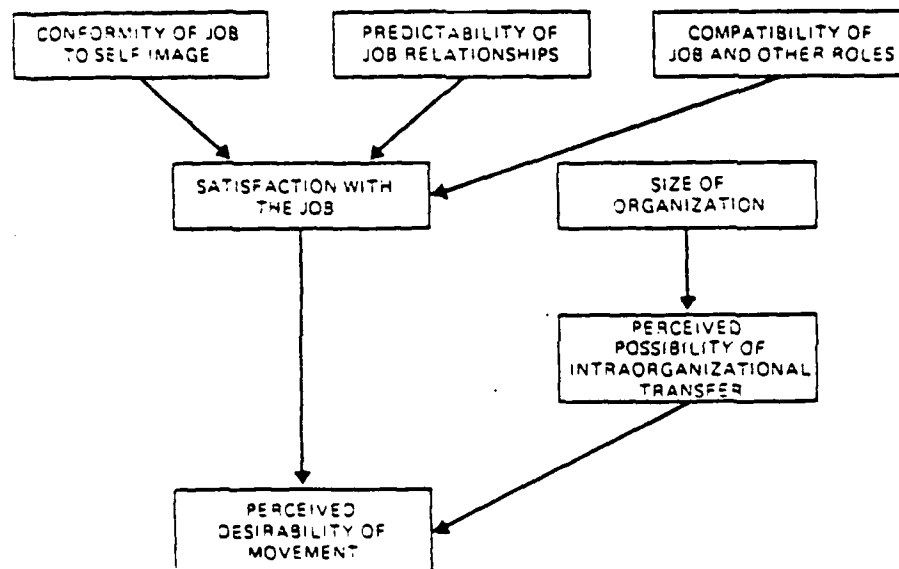


Fig. 1. March and Simon's (1958) Model of Major Factors Affecting Perceived Desirability of Movement.

Source: March, J.G., and H.A. Simon, Organizations. New York: Wiley, 1958.

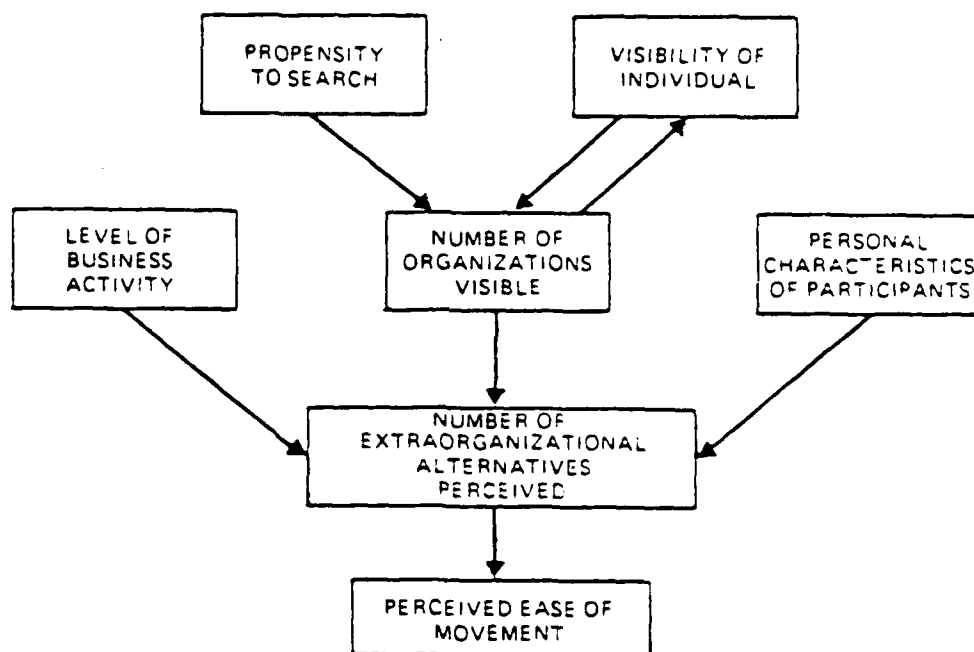


Fig. 2. March and Simon's (1958) Model of Major Factors Affecting Perceived Ease of Movement.

Source: March, J.G., and H.A. Simon, Organizations. New York: Wiley, 1958.

Therefore, perceived ease of movement is the individual's feeling of how easy it would be to obtain an alternative position in an external organization. Further, they view extraorganizational alternatives as a function of the level of business activity, personal characteristics (sex, age, social status, length of service--specialization), and the number of organizations visible to the individual.

Hence, March and Simon (1958) felt that the perception of alternative jobs available to the individual is critical to the individual's decision to remain with or leave an organization. This perception, coupled with attitudes about the job like job satisfaction or dissatisfaction, will provide a clear prediction of the employee's turnover behavior.

Price (1977). Price's model, developed in 1977 and presented here in Figure 3, indicates that there are several determinants of turnover. These are (1) pay level, (2) integration, (3) instrumental communication, (4) formal communication, and (5) centralization. Price predicts that numbers one through four are positively related to turnover, while centralization is negatively related.

A noteworthy feature of Price's model is that satisfaction and opportunity are treated as intervening variables in the turnover process rather than as independent

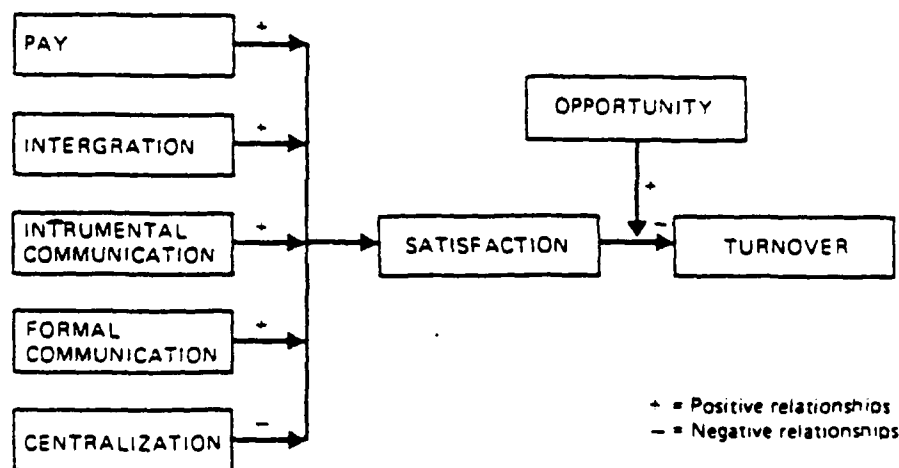


Fig. 3. Price's (1977) Model of Turnover Determinants and Intervening Variables.

Source: Price, James L. The Study of Turnover. Ames, IA: The Iowa State University Press, 1977.

variables. This relationship is depicted in Figure 3. Another key aspect of this model is that dissatisfaction is predicted to result in turnover only when the opportunity is relatively high. This suggests that there is a definite interaction between satisfaction and opportunity. This is consistent with March and Simon's (1958) model of turnover that proposed job satisfaction/dissatisfaction must be coupled with the perceived ease of movement (a perceived alternatives measure) to accurately predict turnover (Mobley, 1982).

Therefore, the Price (1977) model clearly predicts that perceived alternatives (opportunity) moderate the attitudinal responses of the individual (job satisfaction/dissatisfaction) and their relationship with intentions and turnover behavior.

Mowday, Porter, and Steers (1982). Mowday, Porter, and Steers present a "largely cognitive model of employee turnover that focuses on the processes leading to the decision to participate or to withdraw" (p. 123). The model, is comprised of three distinct, but sequential components. These components, are "(a) job expectations and job attitudes; (b) job attitudes and intent to leave; and (3) intent to leave, available alternatives, and actual turnover" (p. 123). These components are depicted in Figure 4.

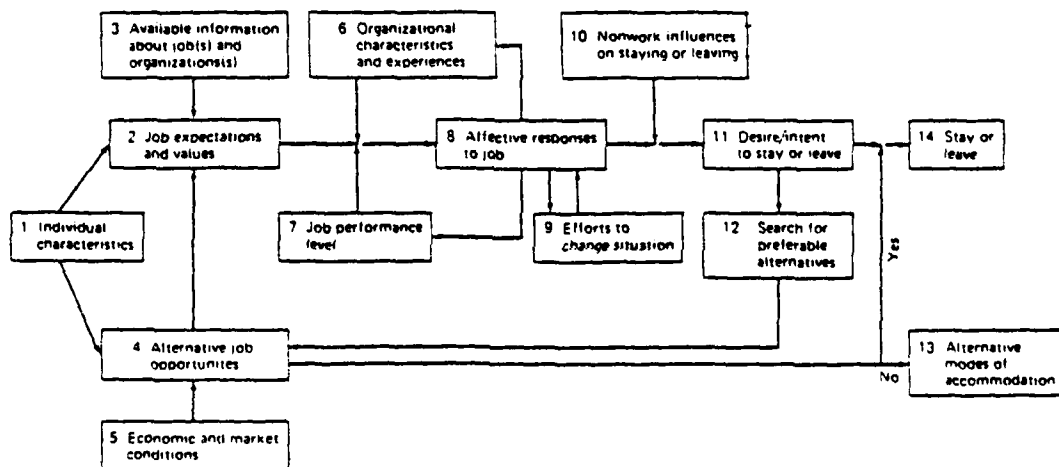


Figure 4. Mowday et al.'s (1982) Model of Voluntary Employee Turnover.

Source: Mowday, R. T., L. W. Porter, and R. M. Steers, The Psychology of Commitment, Absenteeism, and Turnover. New York: Academic Press, 1982.



This model, developed by Steers and Mowday (1981) and later presented by Mowday et al. (1982), also contains components of models developed by March and Simon (1958); Mobley et al. (1979); and Price (1977). Even though many of the Steers and Mowday (1981) model's aspects were proposed in earlier models, there are, according to Mowday et al. (1982) and Meola and Kochel (1983), four unique aspects that should be recognized.

Mowday et al. (1982) state that first, the role of available information about the prospective job and organization need to be explicitly recognized. Secondly, job performance must be included as a factor influencing the affective responses to the job. Third, their model implies that turnover is multifaceted by considering that several job attitudes influence this behavior. Finally, rather than indicating that when an employee is dissatisfied he/she will intend to leave and then leave, this model recognizes that an employee may attempt to change the situation or environment. If he/she cannot change the situation satisfactorily, then the employee will proceed with the intention-behavior path.

The important aspect of the Steers and Mowday (1981) model with respect to this thesis is that the authors explicitly recognize that behavioral intentions could possibly influence turnover indirectly, as compared to Mobley et al.'s (1979) model showing behavioral intentions

as the immediate antecedent of turnover behavior. That is, "an employee's intent to leave may further influence turnover directly by causing the employee to initiate search behavior for preferable alternative jobs" (p. 129-130).

Therefore, the search for and perception of alternative jobs plays a major role as a predictor variable influencing the individual's desire and intent to search, intent to quit and ultimately his/her turnover behavior.

Mobley, Griffeth, Hand, and Meglino (1979). Figure 5 portrays a model of the turnover process developed by Mobley et al. (1979). Mobley et al. (1979) state that this model attempts to show the overall complexity of the turnover process. The model indicates that there are many key variables and four primary determinants that influence intentions to quit and subsequent turnover behavior (p. 125).

Mobley et al. (1979) incorporate many key variables in their turnover model. They have grouped these variables into three broad categories. These are: (1) economic variables; (2) organizational variables; and (3) individual variables. Each category will be discussed individually.

Mobley, et al.'s model (1979) lists three key economic variables that are related to the turnover process. The first variable is the employment/unemployment level in the economy. Mobley (1982) states that "there is ample evidence of a strong negative aggregate relationship between

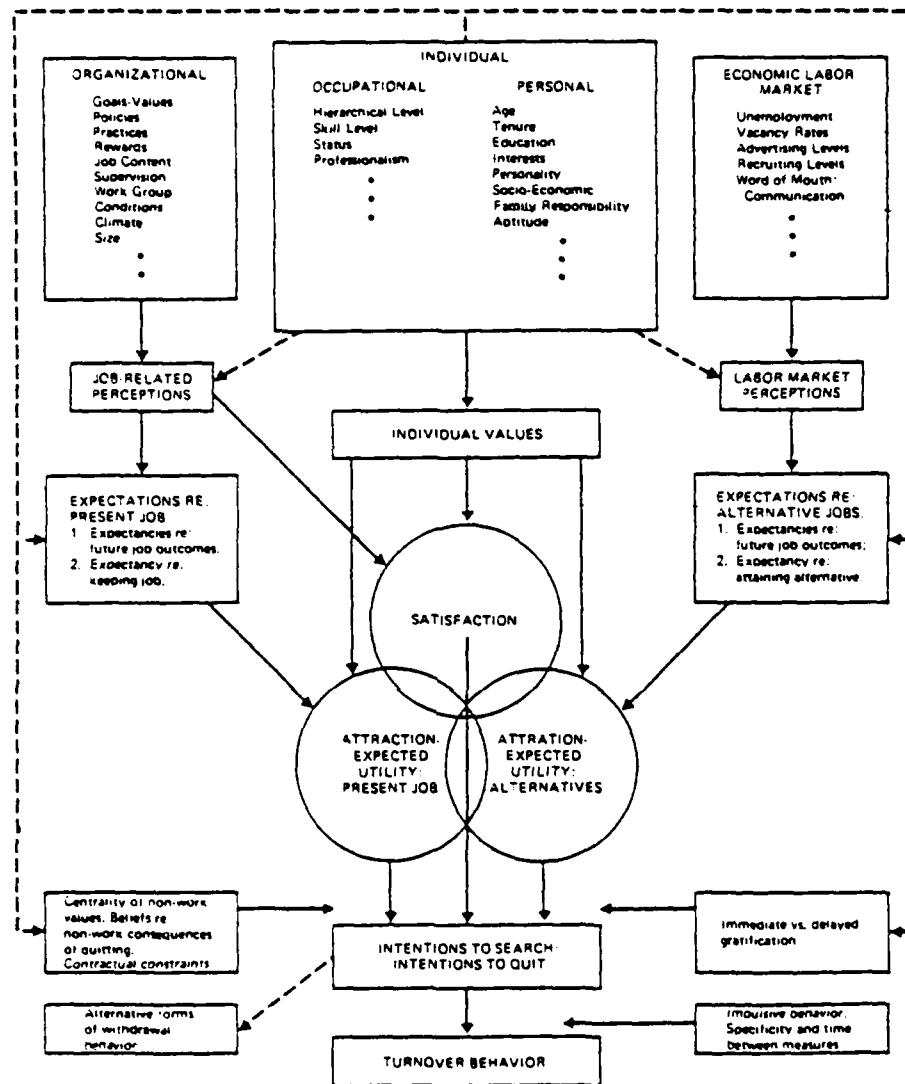


Fig. 5. Mobley et al.'s (1979) Expanded Model of the Turnover Process.

Source: Mobley, W.H. and R.W. Griffeth, H.H. Hand, and B.M. Meglino. "Review and Conceptual Analysis of the Employee Turnover Process" (Psychological Bulletin, Vol. 86, 1979), p. 517.

unemployment levels and turnover rates" (p. 88). This relationship is illustrated in Figure 6.

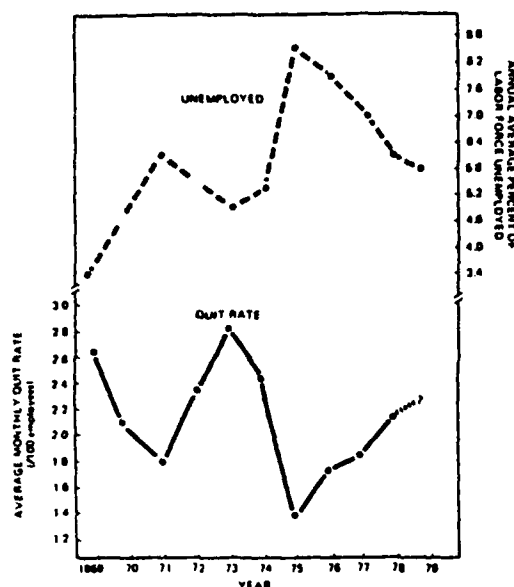


Fig. 6. Yearly Average Monthly Manufacturing Quit Rate and Annual Average Percent of Labor Force Unemployed, 1969-79.

Source: Mobley, William H. Employee Turnover: Causes, Consequences, and Control. Reading MA: Addison-Wesley Publishing Company, Inc., 1982 (p. 84).

Mobley (1982) observes that turnover drops off during periods of high unemployment primarily due to the non-availability of alternate employment. However, he warns that the analysis of unemployment and turnover should consider the geographic region, the industries influenced and the occupational factors.

Mobley (1982) states that the research regarding the expectancy of finding an alternative job has indicated that there is "a strong negative relationship between unemployment levels and quit rates" (p. 106). Further, similar concepts are expressed by March and Simon (1958),

Price (1977), Mobley (1982), and Hulin et al. (1985) who report that the state of the economy significantly effects macro turnover rates, but less information is available on how individual's make use of job market information. This thesis will measure the perception of the economy at the individual level of analysis and will then seek to compare these perceptions to the actual turnover decisions.

The second economic variable, labor force composition and mix, relates primarily to demographic factors such as the "baby boomers" coming of age in the work force and the increased number of women entering the labor market. Mobley (1982) feels that these changes in the labor force could lead to an expensive labor market for employees and a highly competitive labor market for younger employees in the coming decade.

One key result of this effect is a greater movement of younger employees to other organizations, resulting in higher predicted turnover; greater costs in replacing employees who quit; more emphasis placed on training; and the increased use of inexpensive, untrained labor (Mobley, 1982). This process accurately describes the situation of young, first-term enlistees in the U. S. Air Force.

According to Mobley (1982), the third economic variable, inflation, can influence turnover and turnover-related variables in a number of ways, including:

1. Encouraging more secondary wage earners to enter the labor market to supplement family earnings;

2. Encouraging turnover as a means to protect earnings, assuming higher paying jobs are available;
3. Discouraging turnover involving geographic mobility due to the cost of moving [p. 88].

Mobley feels that inflation could very well influence turnover, but more research is required to determine the extent and strength of the relationship.

Mobley (1982) feels that there are many organizational variables that influence turnover. These are (1) type of industry, (2) occupational categories, (3) organizational size, (4) work unit size, (5) pay, (6) job content, and (7) supervisory style.

Mobley (1982) and Porter and Steers (1973) indicate that the only strong generalization that can be made regarding aggregate analyses of organizational variables is that turnover rates tend to be higher in lower paying industries. Mobley (1982) indicates that there is weaker support for the other variables.

There are a number of individual variables that could contribute to the turnover process. Mobley (1982) lists the following variables in his discussion: (1) demographic and personal factors such as: age, tenure, sex, education, biographical data, personality, interests, aptitude and ability, source of referral, professionalism, performance, and absenteeism; (2) integrative variables such as: (a) job satisfaction which can further be broken down into overall job satisfaction, satisfaction with pay, satisfaction with promotion, satisfaction with job content, satisfaction with

coworkers, satisfaction with supervision, and satisfaction with working conditions; (b) career aspirations and expectations, (c) organizational commitment, (d) stress, (e) expectancies regarding alternative jobs and (f) behavioral intentions.

Research on demographic and personal variables yields only one strong conclusion; age and tenure are consistently and negatively associated with turnover (Mobley, 1982). Interests, aptitude, and abilities have been weakly related to turnover because the amount, quality, and consistency of such evidence have been insufficient to verify the reliability of these relationships. Finally, the relationships between turnover and personality, sex, education, professionalism, performance, and absenteeism remain inconclusive.

The research on integrative variables supports the negative relationship between overall satisfaction and turnover, but fails to produce overwhelming results.

The fact that the correlations are not stronger suggests other variables--such as perceptions of the availability of attractive alternative jobs, relative importance of non-work values and career expectations--are also involved in turnover [Mobley, 1982, p. 105].

In addition, Mobley (1982) states that there is a consistent negative relationship between satisfaction with job content and turnover. He also states that there are frequently observed, but less consistent, correlations between turnover and satisfaction with pay, promotion,

supervision, coworkers and working conditions. He concludes by stating "satisfactions, overall and by dimension, are among the integrative variables required for understanding turnover" (p. 105).

Mobley (1982) states that the research to date regarding links between career aspirations, career expectations stress and turnover are inconclusive. However, the research on organizational commitment, expectancy of finding an alternative job, and intentions to quit-stay has found strong relationships with turnover.

Mobley (1982) summarizes Porter et al., Steers, and Mowday et al., with respect to organizational commitment research as "there is strong evidence that commitment is related to turnover" (p. 106). Furthermore, Mobley states that "there is also evidence that commitment is a better predictor of turnover than satisfaction" (p. 106).

In summary, of the key variables discussed, Mobley (1982) feels that the following factors contribute significantly to the turnover process. First, he proposes that there is "a strong negative relationship between unemployment levels and quit rates" (p. 106). Further, turnover rates tend to be higher in lower paying industries.

Secondly, he feels that there is a greater movement of younger employees to other organizations, resulting in higher predicted turnover and turnover related costs. This point is relevant for this thesis because it accurately



describes the situation of young, first-term enlistees in the U. S. Air Force.

Third, age and tenure are consistently and negatively associated with turnover.

Fourth, expectancy of finding an alternative job and intentions to quit-stay, have strong relationships with turnover.

Mobley et al.'s (1979) Key Determinants of Turnover.

Mobley et al. (1979), and Mobley (1982) list four key determinants of turnover. These determinants are: "(1) Job Satisfaction-Dissatisfaction; (2) Expected Utility of Alternative Work Roles (internal to the organization); (3) Expected Utility of Work Roles (external to the organization); and (4) Non-work Values and Contingencies" (Mobley, 1982, p. 125).

Mobley (1982) describes job satisfaction as a "present-oriented evaluation of the job involving a comparison of an employee's multiple values and what the employee perceives the job as providing" (p. 125). Several additional considerations are necessary to understand job satisfaction and its relationship to turnover. First, satisfaction is a highly individualized evaluation that is dependent on individual differences. Secondly, an important aspect of this conceptualization of job satisfaction is its emphasis on employee perceptions. Therefore, satisfaction is a function of what the employee perceives relative to his/her

values. Third, satisfaction is multifaceted because it is a composite of the extent to which a set of important values are perceived as being attained on the job. Finally, satisfaction is a present-oriented evaluation of the job. As such, it does not capture the employee's expectations and evaluation of future conditions in the organization.

Mobley (1982) describes the role the expected utility of internal work roles plays by suggesting that even though an employee may currently be dissatisfied, turnover may not occur, even though other jobs are available. The individual may expect that the present job will change or lead to more satisfying roles in the future. For example, a military recruit, presently going through a basic training program that causes him to be very dissatisfied, may not quit because he/she expects the job to be considerably more satisfying after basic training.

The expected utility of external work roles seeks to capture the individual's expectation of finding an attractive alternative job external to the present organization. This expectation, taken together with the expected utility of internal work roles, may accurately predict turnover. As Mobley (1982) states, "the dissatisfied employee and/or the employee with low expectations regarding internal alternatives may quit because a highly attractive external job is perceived" (p. 128).

The preceding variables are based on the individual's work values, however missing from this framework are potentially important non-work values and roles. Whether or not individuals translate their present and future evaluation of the job and alternatives into turnover intentions and behavior may be a function of the degree to which the job or alternatives are expected to facilitate or interfere with important non-work values and/or conflict with non-work roles. For most individuals, there will probably be a mix of work and non-work values involved in the turnover decision. Family orientation, life style and geographic preferences, in addition to religious, cultural, altruistic, athletic, and social values will interact with work-related values. Thus, the understanding and prediction of turnover require the assessment of work and non-work roles.

In summary, Mobley et al.'s (1979) and Mobley's (1982) key determinants reflect the important role perceived alternatives play with respect to the utility of external and internal work roles in the turnover process. Mobley et al.'s (1979) model is relevant to this thesis effort because the importance of perceived alternatives is explicitly recognized as a predictor of both behavior and behavioral intentions.

### Summary of Models

Price's point that satisfaction and opportunity are key intervening variables is consistent with Mobley's view of employment/unemployment and quit rate relationships. It is also consistent with March and Simon's analysis of turnover based on the perceived ease of movement, or perceived alternatives (opportunity), and Mowday et al.'s feelings that turnover is a direct result of the perceived available alternatives and economic conditions. Additionally, the later models (i.e., Mobley et al., 1979; Mowday et al., 1982) have incorporated a belief-attitude-intention-behavior network showing intentions as the antecedents of behavior.

Thus, there are two significant similarities among these models. First, the later models recognize the importance of behavioral intentions as a critical linkage between attitudes (job dissatisfaction, etc.) and behavior (turnover). Secondly, all of the models consider the perceived availability of alternatives as directly influencing turnover or intentions. Therefore, there appears to be convergent validity among the leading authors with respect to the attitude (satisfaction/dissatisfaction), coupled with a perception of opportunity (ease of movement, availability of acceptable alternatives) leading to the development of search or quit intentions, followed by the decision to quit or stay.

### Empirical Research on Perceived Alternatives

There is a void in the empirical turnover literature regarding how perceived alternatives affect the turnover process. In fact, only nine studies to date could be found that studied this relationship. However, the lack of research in this area by no means indicates its lack of importance. Mobley, Horner, and Hollingsworth (1978), described the probability of finding an acceptable alternative as one of the key intermediate linkages in the model first developed by Mobley in 1977.

According to Mobley et al. (1978), "it is widely assumed that the availability of alternatives exerts a significant influence on turnover" (p. 409). However, because this variable is subjectively weighted by the employee, it is difficult to describe and measure and therefore has only been infrequently included in studies of individual turnover.

Schneider (1976) found that the inclusion of perceived alternatives enhanced the prediction of and understanding of withdrawal intentions. Further, Dansereau, Cashman, and Graen (1974) found that perceived expectancy of finding a comparable job moderated the relationship between job attitudes and turnover.

As Mobley et al. (1978) suggest, "these empirical findings, taken together, with the conceptual basis suggested by March and Simon (1958), Mobley (1977), Price

(1977), and others, argues strongly for the inclusion of perceived alternatives in individual turnover research" (p. 409).

Each of the nine studies investigating perceived alternatives will be discussed individually.

Mobley, Horner, Hollingsworth (1978). In 1978, Mobley, et al. surveyed 203 full-time employees in a medium-sized southeastern urban hospital. Although participation was voluntary, the researchers obtained a 90% response rate. A questionnaire was used to measure employee job satisfaction, perceptions and goals. "Probability of finding an acceptable alternative was measured on a 5-point Likert scale ranging from very unlikely (1) to certain (5)" (p. 410). The researchers obtained a correlation of  $r = .07$  between perceived alternatives and turnover which was not statistically significant. Thus, they concluded that the "probability of finding an acceptable alternative did not exhibit a significant direct effect" on turnover (p. 412).

Miller, Hulin, and Katerberg (1979). Miller et al., tested Mobley et al.'s (1978) turnover model including the perceived alternatives-turnover linkage by administering questionnaires to two samples of National Guardsmen containing 235 and 225 individuals, respectively. The probability of finding an acceptable alternative was measured in the questionnaire by asking participating members, "What are your chances of obtaining a part-time

civilian job with similar pay and benefits as you receive in the guard?" The researchers found that the weakest component of Mobley et al.'s (1978) model was the probability of finding an acceptable alternative. However, they did find that the correlations between turnover and the probability of finding an acceptable alternative were significant for both samples. For the first sample the correlation was  $r = .16$  ( $p < .05$ ), and for the second sample the correlation was  $r = .33$  ( $p < .01$ ).

Therefore, even though the probability of finding an acceptable alternative was the weakest component of the model studied, it was positively and significantly related to turnover in both cases.

Martin (1979). Martin (1979) sampled "250 full-time members of a medium size, service oriented business organization" (p. 317). In this study Martin related the intent to leave to the opportunity to leave. Opportunity was defined as "the extent to which alternative occupational roles are available in the environment as suggested by employment opportunities" (p. 316). That is, opportunity was considered an environmental variable. Martin used a questionnaire to collect his data. Martin found that opportunity was significantly correlated with the intent to leave ( $r = .15$ ,  $p < .05$ ). However, there were no findings relating opportunity to actual turnover levels.

Price and Mueller (1981). Price and Mueller's (1981) sample consisted of a group of 1091 nonsupervisory, registered nurses. They attempted to show that opportunity had a direct causal link to turnover. The collection of data was performed using a two-step longitudinal design. A questionnaire was used to gather data on the availability of alternative jobs in the organization's environment during 1976. A follow-up study was then performed in 1977 to determine if perceived alternatives and other factors influenced the turnover process. Price and Mueller found a significant correlation of .18 ( $p < .01$ ) between the perceived availability of alternative jobs (opportunity) and turnover.

Michaels and Spector (1982). Michaels and Spector (1982) surveyed 112 employees of a community mental health center in an urban area of the southeastern United States. A battery of questionnaires were used as the primary data gathering instruments on perceived alternatives, organizational commitment, job satisfaction, personal characteristics, leadership consideration, and the job diagnostic survey. The results of the study were inconclusive. Michaels and Spector found only a weak correlation ( $r = .12$ ,  $p < .05$ ) between perceived alternatives and turnover, and only an  $r = .04$  correlation between perceived alternatives and intent. Therefore, Michaels and Spector concluded that "perceived alternatives



added nothing to the model as a direct cause of intention to quit, or turnover, or as a moderator" (p. 53).

Meola and Koechel (1983). Meola and Koechel surveyed 739 Air Force officers drawn from a population of 12,923 individuals from five groups. These groups were chosen based on the high and low demand in the civilian sector for their specialty skills. A survey instrument was administered to the 739 individuals. The questionnaire was developed to "measure several variables dealing with marketability of respondent skills and availability of employment alternatives" (p. 36). Responses were recorded on a six-point Likert scale ranging from very good demand (1) to (6) no demand. Meola and Koechel used a comparison between perceived alternatives and a surrogate measure of turnover (intent to remain) since actual turnover data were not available. High demand group results were significant and positively related to turnover with an  $r = .52$  ( $p < .01$ ). The low demand group results were also significant with  $r = .56$  ( $p < .01$ ).

Stumpf and Hartman (1984). Stumpf and Hartman performed a longitudinal study on 85 individuals at a northeastern graduate school. The 85 individuals received a questionnaire asking them to rate items such as environmental exploration on a five-point Likert scale and realistic expectations on a seven-point Likert scale. Stumpf and Hartman found that the correlation between the

intent to quit and later environmental exploration was significant ( $r = .22$ ,  $p < .05$ ). Environmental exploration and the intent to quit significantly predicted further environmental exploration and turnover ( $r = .42$ ,  $p < .01$ ).

Flores (1984). Flores surveyed 1006 Air Force enlisted personnel that were due to make a reenlistment decision within one year from the time of her study. These individuals were drawn from 20 different career fields, and these fields were broken down into high and low attrition categories. The survey instrument was administered to individuals selected through "an Air Force wide census sampling of the specially selected enlisted personnel" (p. 26-30). The names of personnel selected to receive the questionnaire were generated by the ATLAS system, an Air Force wide personnel data base. Flores (1984) focused on the linkage between the availability of alternative jobs and turnover. Her results indicated that there was a significant relationship between perceived alternatives and "a surrogate measure of turnover, intent to remain" (p. 62). The perceived alternative correlation with the intent to remain was significant at the  $p < .01$  level ( $r = -.34$ ).

Flores concluded that her results did not provide strong evidence supporting the utility of her model of perceived alternatives as the antecedents of employee turnover.

Hom, Griffeth, and Sellaro (1984). Hom et al. (1984) evaluated the Mobley (1977) turnover model in a study involving a sample of 192 employees in a large northwest Pennsylvania city hospital. A questionnaire was administered and the respondents were asked to provide their names to ensure accurate tracking of the turnover cases.

Hom et al. (1984) tested Mobley's (1977) model and obtained modest support for the following variable relationships to turnover: (1) comparison of alternatives relative to the present job  $r = .16$  ( $p < .05$ ); (2) intention to quit  $r = .24$  ( $p < .05$ ); (3) intention to search  $r = .31$  ( $p < .05$ ); and (4) search for alternatives  $r = .30$  ( $p < .05$ ).

Hom, et al. (1984) also developed an extension to Mobley's 1977 model and tested it. Hom et al. (1984) felt that unlike previous frameworks, their model more accurately represented the turnover process by proposing that the immediate causal antecedent of turnover was not behavioral intention, but rather search behavior. Further, they proposed that the intention to quit only had an indirect influence on turnover by acting on the intention to search and then search behavior. Hom et al. (1984) found no support when relating the intent to search to: (1) the prediction of turnover; (2) the intention to quit; (3) and the evaluation of alternatives. However, their test of the Mobley (1977) model prior to their extension produced

statistically significant results with respect to the role perceived alternatives play in the turnover process.

#### Conclusions on Perceived Alternatives Research

The nine studies reviewed produced only mixed results when attempting to investigate the relationship between perceived alternative employment opportunities and turnover. Of these studies, Mobley et al. (1978) did not find a significant relationship between perceived alternatives and turnover. Two studies found only weak support for the relationship between opportunity and the intent to leave (Martin, 1979), and perceived alternatives and turnover (Michaels and Spector, 1982). Further, (Flores, 1984) only found support for a relationship between perceived alternatives and a surrogate measure of turnover, and Hom et al. (1984) found no support for their extension of Mobley's (1977) model with respect to perceived alternatives. Hom et al. (1984) did find support for perceived alternatives, however, in the test of Mobley's (1977) model.

There are several obvious considerations that must be taken into account prior to drawing conclusions that the evidence is inconclusive. First the different research studies used different measurement instruments, different terminology, and some did not consistently use actual turnover criteria. Second, "the reliability and validity of 'opportunity' measures must be in question" (Flores, 1984, p. 21). Third, several of the studies proposed different linkages between opportunity/alternatives and turnover.

For example, Martin proposed that opportunity had an interactive relationship with job satisfaction, which in turn, influenced intent. Price and Mueller felt that opportunity had a direct effect on turnover, similar to the March and Simon (1958) hypotheses. Michaels and Spector performed a path analysis of the Mobley et al. (1979) model trying to link perceived alternatives to intention, turnover, and finally as a moderator between job satisfaction and intention to turnover, or between intent and turnover.

Additionally, there are several less obvious reasons these studies have produced mixed results. Hulin et al. (1985) suggest that there are three key explanations why the hypothesized role of perceived alternatives has not received strong support at the individual level. The first reason is that "different economies produce different work forces" (p. 240). Hence the work force in a given area may be composed of a large number of casual-status workers (drifters), that are part of the work force only in periods of economic expansion. Hulin et al. (1985) suggest that these individuals are unlikely to quit after engaging in the cognitive processes outlined in current theoretical turnover models; rather, these individuals quit because they intended to do so when they took the job. If these workers are included in turnover studies, they are likely to bias or skew the results.

The second reason, according to Hulin et al. (1985), is that job opportunities tend to influence job satisfaction directly. The more abundant and desirable alternatives that are available to an individual, the lower the job satisfaction with the present job. Conversely, when few desirable alternatives are available, such as during downturns of the business cycle, the utility of alternatives foregone in order to hold a specific job is decreased. Thus, the job satisfaction with that specific job is increased due to the individual's perception that there are few alternatives available to him/her. The process of job satisfaction fluctuating with the perception of opportunities can therefore bias the results of perceived alternatives studies.

Finally, Hulin et al. (1985) propose that perceived alternatives have not been substantiated at the individual level because job opportunities, not intentions influence turnover directly. However, Hulin et al. (1985) do not make any distinction between expected offers and existing offers with respect to opportunity; therefore it can be concluded that they propose that existing offers from external organizations strongly influence an employee's decision to remain or leave the present job.

Another reason why perceived alternatives have not been strongly substantiated at the individual level in turnover research is that turnover studies including perceived

alternatives as a predictor, have only consistently used one measure for perceived alternatives. Other turnover research efforts examining attitudinal variables, such as job satisfaction, with relatively sound instruments, such as the Job Descriptive Index (JDI) and Minnesota Satisfaction Questionnaire (MSQ), may use as many as fifty questions to measure job satisfaction. It is a well-known psychometric principle that the reliability of an instrument is a function of its length.

One explanation for the failure to test perceived alternatives more broadly and vigorously is that many researchers may have felt that perceived alternatives are not a multi-faceted predictor variable, and thus have used only one measure. This assumption may have directly influenced why perceived alternatives have not received better support at the individual level.

Due to the limited data and mixed results available in this area, and the possible benefits to be gained by a better understanding of how perceived alternatives affect turnover, further research seems warranted. This research should definitely include a multivariate approach to the measurement of perceived alternatives.

#### Problem Statement

This study investigates how Air Force enlisted personnel choose to leave, or stay in, the service based on their perceptions and evaluations of alternative sources of

employment. This information may be useful in determining how perceptions of alternatives influence Air Force enlisted personnel, and how these perceptions of alternatives influence the intentions of enlisted personnel to reenlist in or separate from the Air Force.

This knowledge may, in turn, impact how the Air Force Military Personnel Center, Enlisted Retention Branch approaches programs designed to foster reenlistments.

#### Objectives of the Study

This longitudinal, follow-up to Flores (1984) thesis is directed at identifying how Air Force enlisted personnel arrive at a decision to reenlist. The primary focus shall be to identify what effect perceived alternative job opportunities have on the individual's intent to search, intent to quit, and the decision to reenlist or separate.

This study uses survey data from Flores 1984 effort and longitudinal data subsequently collected on the sample members' decisions to leave or remain in the Air Force. The survey data from Flores effort will be correlated with the actual turnover decisions made by the individuals.

#### Model Development

To this point, the literature review has examined: (1) Hulin et al.'s (1985) speculations on why the perceived alternatives-behavioral intentions/behavior linkage has been unsubstantiated at the individual level; (2) several



theoretical models that incorporate perceived alternatives as a critical predictor of intentions and behavior; and (3) an empirical review of research to date testing the perceived alternatives-intentions/behavior linkage.

From this review, we have developed a model which attempts to explain the way an individual develops, evaluates, and acts upon perceived alternative job opportunities. The model, presented in Figure 7, includes five major groupings of variables. Similar to a model of military personnel turnover proposed by Bluedorn (1979), the present model contains a group of variables that "pull" the individual toward staying with the present job and a group of variables that "push" the individual toward evaluating alternative jobs. These "pulls" directly influence behavioral intentions while the "pushes" influence behavioral intentions through perceived alternatives.

This model also contains a grouping of variables that "push" the individual toward consideration of his/her options and towards seeking alternative employment. These include job market factors and personal competitiveness. Perceived alternatives, in turn, are predicted to influence behavioral intentions, and finally behavioral intentions influence turnover behavior (i.e., reenlistment).

Organizational Attachment Factors. Several of the components in the model serve in tandem to develop feelings of attachment to the job. First, we view the way an

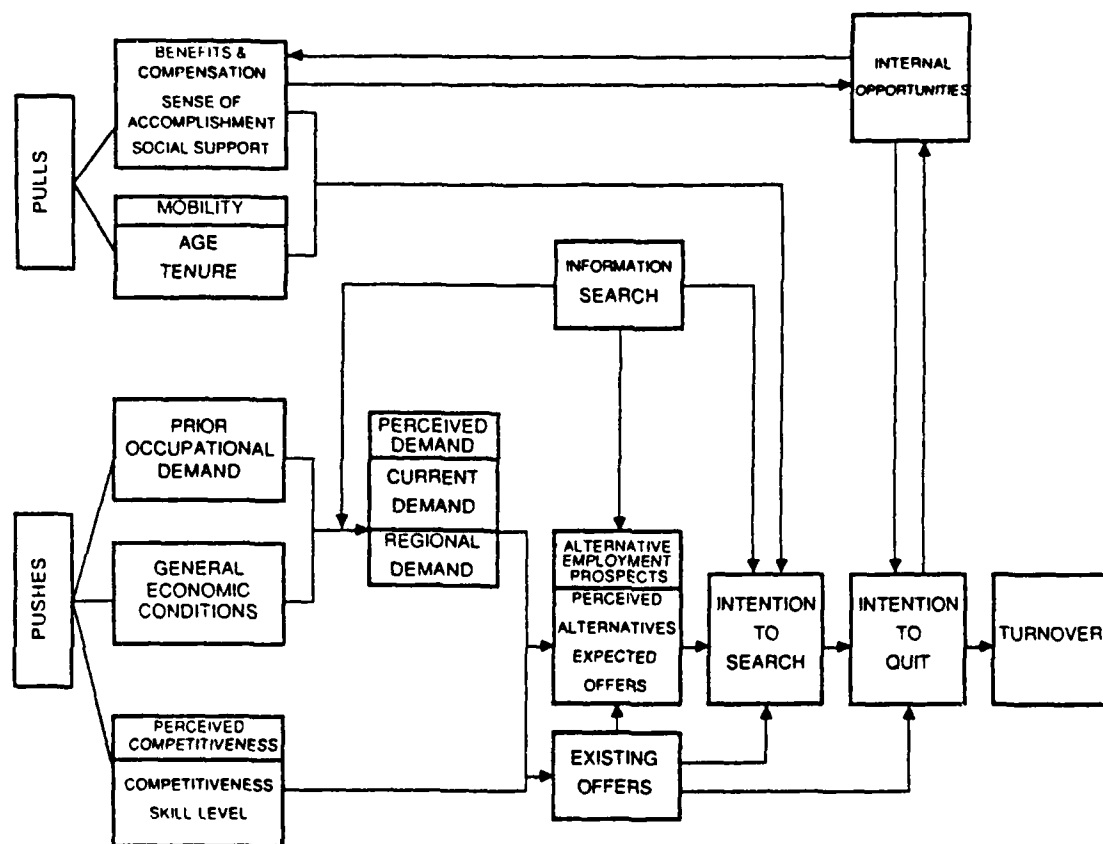


Fig. 7. Proposed Model of the Way Individuals Perceive Alternative Job Opportunities, and Their Relationships to Behavioral Intentions and Behavior.

individual forms behavioral intentions, such as the intent to quit, as a function of his or her satisfaction or dissatisfaction with the: (1) pay, benefits, and compensation provided by the organization; (2) sense of accomplishment; and (3) encouragement he/she receives from family and friends to stay or leave the present job. These factors are likely to be associated with the propensity for a search of internal opportunities for cross-training or reassignment into another career field, which then will tend to have a negative effect on the intention to quit.

Additionally, the individual's mobility, indicated by his/her age and tenure with the organization, is predicted to be an inverse function of investments in the organization (Mobley et al., 1978). These variables, coupled with benefits and compensation, sense of accomplishment, and encouragement are predicted to influence the individual's plans to search for outside employment (i.e., intention to search).

Collectively, these variables form what we call "pulls" toward the organization. That is, if these factors are evaluated in a positive light, the individual's intent to search and intent to quit are predicted to diminish. Rather, the individual will engage, if at all, only in internal search behavior. However, if the individual views these factors from a negative or dissatisfied position, there will be less attraction toward the organization.

He/she will then be more inclined to develop intentions to search for alternative job opportunities within and/or external to the present organization. This situation is then more likely to lead to intentions to quit.

One point should be made concerning the pull variables. No job satisfaction measure was used in Flores (1984) thesis and therefore no job satisfaction variable appears in the model. However, since the job satisfaction-turnover relationship has been studied extensively by previous researchers (e.g., Steel and Ovalle, 1984), little would be gained by replicating this relationship. Rather the present study focuses upon intermediate linkages presumed to be set in motion by basic affective reactions to the job.

Organizational Detachment Factors. Secondly, the model depicts the way an individual forms behavioral intentions by evaluating the "push factors" and the subsequent evaluation of the availability of alternative jobs.

Individuals evaluate the prior demand for their specialty, the general labor market conditions (availability of jobs, business cycle, etc.), information about available jobs and thus develop a perception of the current and regional demand for their occupational specialty.

Additionally, the individual assesses his/her perceived competitiveness in the labor market and his/her skill (performance and ability) level with respect to others in that specialty. This assessment, coupled with the perceived

demand, then influences the way individuals perceive alternative jobs.

Third, alternative employment prospects act as intervening variables between pushes and behavioral intentions. The alternative employment prospects are comprised of knowledge the individual has of unsolicited, existing job offers external to his/her organization, the expected number of job offers the individual anticipates, and finally, how easy the individual feels it would be to obtain another job. The latter variable, ease of obtaining alternate employment, is close conceptually to previous definitions of perceived alternatives (e.g., Miller et al., 1979; Mobley et al., 1978). The perceived alternatives are externally influenced by the amount of information available to the individual regarding alternative positions in his/her field, and internally by his/her desire to obtain that information.

The perceived alternatives thus influence his/her behavioral intentions to search for an alternative job and to quit the present job. The prior demand, general economic conditions, and available information regarding the individual's career field influence his/her perceived demand (or lack thereof) in that field. Additionally, the individual's perceived competitiveness and skill level in the labor market, coupled with the perceived demand, is predicted to influence the perception of alternatives.

If there are many perceived alternatives, the individual is likely to undertake an actual search of the market (i.e., intention to search for alternative employment), and possibly form an intention to quit.

Fourth, the pushes, perceived alternatives, pulls and internal opportunities collectively influence the individual's intent to search and intention to quit.

Finally, the intention to quit is predicted to most directly influence the individual's turnover behavior (Steel and Ovalle, 1984).

### Hypotheses

The model presented above suggested the following hypotheses:

Hypothesis 1. The immediate antecedents of behavior (the intention to search and the intention to quit) will be significant predictors of turnover.

Hypothesis 2. Positive perceptions of available alternatives will have a significant positive effect on turnover.

Hypothesis 3. Positive perceptions of alternative job prospects (perceived alternatives and expected job offers), the intention to search, and negative perceptions of internal opportunities for movement, will positively affect the individual's intention to quit.

Hypothesis 4. Negative perceptions of benefits and compensation, sense of accomplishment, social support, and

the individual's mobility (age, tenure), and positive perceptions of alternative job prospects, information search, and existing offers will positively affect the intent to search.

Hypothesis 5. Negative perceptions of pull variables and positive perceptions of push variables will positively affect the intent to search.

Hypothesis 6. Positive perceptions of prior occupational demand, general economic conditions, perceived competitiveness (personal competitiveness and skill level), perceived demand (current demand and regional demand), and information search will positively influence alternative job prospects and existing offers.

### III. Method

#### Sample

Subjects were 452 Air Force enlisted personnel surveyed by Flores in 1984. The population was specifically selected by Flores to focus on those individuals that had a reenlistment decision to make within one year after her study. Thus a follow-on, longitudinal study could be performed to relate the survey results of Flores (1984) to the actual turnover or reenlistment decisions made.

These individuals were selected from 6 of the highest attrition career fields and 14 of the lowest attrition career fields in order to maximize the extreme effects of intraoccupational demand on propensity to reenlist. The total sample was drawn by Flores (1984) from the Air Force Specialty Codes (AFSCs) in Table I. The low attrition occupational group was formed by Flores (1984) from the Air Force Specialty Codes (AFSCs) in Table II. The number of cases shown in the tables beside each AFSC reflect the actual number of respondents from that occupational specialty. The high attrition occupational group was formed by Flores (1984) from the AFSCs in Table III.

#### Procedure

Critical to the present longitudinal study was the data obtained by Flores (1984), since individual responses in



TABLE I

## 1984 Census Population Description

<u>AFSC</u>	<u>Description</u>
113X0	Apr Flight Engineer Specialist
242X0	Apr Disaster Preparedness Spec
302X1	Apr Abn MET/ARE Specialist
341X4	Apr Flight Simulator Specialist
392X0	Apr Maintenance Sched Spec
552X4	Apr Protective Coating Spec
591X0	Apr Seaman
611X0	Apr Service Specialist
622X0	Apr Food Service Specialist
732X4	Career Advisory Specialist
733X1	Manpower Management Specialist
734X0	Social Actions Specialist
751X2	Training Specialist
751X3	Instructional Systems Specialist
753X1	Gunsmith Helper
903X1	Nuclear Medicine Specialist
925X0	Apr Cytotechnology
99500	Recruiter
99501	Research and Development Tech
99504	LGM-3 Facility Manager

Note: Figures provided by MPC/RMS  
(Current as of 31 Dec 83)

Source: Flores, First Lieutenant Leona. An Investigation of the Process by Which Air Force Enlisted Personnel View and Evaluate Their Perceived Availability of Job Alternatives. MS Thesis. School of Systems and Logistics, Air Force Institute of Technology (AU), Wright-Patterson AFB, OH, Sep 1984 (AD-A147 562).

TABLE II

## 1984 Low Attrition AFSCs

<u>AFSC</u>	<u>Description</u>	<u>n</u>
113X0	Apr Flight Engineer Specialist	32
242X0	Apr Disaster Preparedness Spec	12
392X0	Apr Maintenance Sched Spec	31
591X0	Apr Seaman	7
611X0	Apr Service Specialist	27
732X4	Career Advisory Specialist	10
733X1	Manpower Management Specialist	44
734X0	Social Actions Specialist	23
751X2	Training Specialist	32
751X3	Instructional Systems Specialist	2
753X1	Gunsmith Helper	0
925X0	Apr Cytotechnology	1
99500	Recruiter	3
99504	LGM-3 Facility Manager	0

TABLE III

## 1984 High Attrition AFSCs

<u>AFSC</u>	<u>Description</u>	<u>n</u>
302X1	Apr Abn MET/ARE Specialist	5
341X4	Apr Flight Simulator Specialist	74
552X4	Apr Protective Coating Spec	20
622X0	Apr Food Service Specialist	116
903X1	Nuclear Medicine Specialist	2
99501	Research and Development Tech	12

Note: Figures provided by MPC/RMS  
(Current as of 31 Dec 83)

Source: Flores, First Lieutenant Leona. An Investigation of the Process by Which Air Force Enlisted Personnel View and Evaluate Their Perceived Availability of Job Alternatives. MS Thesis. School of Systems and Logistics, Air Force Institute of Technology (AU), Wright-Patterson AFB, OH, Sep 1984 (AD-A147 562).

Flores thesis were compared to individual decisions to separate or reenlist. Flores (1984) used a census sampling of the specially selected enlisted personnel. She distributed questionnaires to 1006 enlistees whose names were generated from an Air Force wide data base system (Atlas). A total of 452 completed and valid surveys were received and represented a 45 percent valid survey return rate.

The individual responses were accounted for by using a coding scheme relating each individual with a code that was used for tracking purposes and data entry. This effort was accomplished to support follow-on, longitudinal work like the present study.

The present study used a three-phased approach. The first phase was to establish whether or not the Air Force Military Personnel Center (MPC) could support the effort. The second phase was to perform a manual search on the worldwide enlisted personnel alpha roster, followed by an MPC computer search on personnel locator and assignment files to determine the status of the individuals surveyed by Flores (1984). The third phase was the sorting and coding of the turnover or reenlistment data gathered in order to correlate Flores survey results with reenlistment criteria.

First, MPC was notified of the follow-up to Flores' (1984) thesis. MPC indicated they could support the effort. After an extensive search, the MPC office supporting this

study located a set of alpha rosters from 1984, 1985, and the current set from 1986. These rosters indicated whether the individual's were eligible for reenlistment or not, and whether they reenlisted or not.

Secondly, a manual search was performed at the Air Force Institute of Technology (AFIT) using the worldwide locator/alpha roster for enlisted personnel to find whether the 452 individuals examined in Flores' thesis remained in, or separated from, the service. Following this effort, the initial results were forwarded to HQ AF/MPC/DPMATE in order to identify whether individuals that separated, did so voluntarily or involuntarily. Also, if the members remained in, MPC tried to determine if they stayed in the same career field or moved to a different career field. This undertaking proved to be too difficult a chore however, since many individuals cross-trained or held more than one duty AFSC.

When MPC sent the data back to AFIT, it was manually entered into a computer data file. Upon completion of this effort, Pearson product-moment correlations were computed between the predictor and criterion variables. Hierarchical regression analysis was then performed to test relations predicted by the model presented in Figure 7.

#### Survey Questionnaire

The survey data used by this thesis were obtained by Flores (1984) using a questionnaire employed initially by

Meola and Koechel (1983). The modified survey, reproduced in the Appendix, was "developed to measure several variables dealing with marketability of respondent skills and availability of employment alternatives" (p. 31). The survey concentrated on five major areas including: (1) demographics such as age and grade; (2) intent to remain/quit and intention to search for alternative jobs; (3) perceptions of the external economic conditions in relation to job hunting; (4) perceptions of the availability of alternative jobs for one's specific occupation; (5) and explanatory variables that moderate the link between perceptions and behavioral intentions.

Description of the variables used for the present study drawn from Flores (1984) will be organized in terms of the relevance of variables to individual linkages hypothesized in the model shown in Figure 7. Therefore, the following major categories of variables were used to evaluate this model: (1) pushes; (2) pulls; (3) alternative job prospects (perceived alternatives); and (4) behavioral Intentions. In addition, an objective criterion of reenlistment behavior was also measured.

#### Psychological Detachment from the Organization ("Pushes").

This study defines pushes as those factors that cause an individual to pursue alternative job opportunities and to consider external options.

Therefore, if an individual perceives that he/she possesses competitive qualifications and that the demand for his/her occupation is high, then he/she is likely to be "pushed" towards evaluating alternative job opportunities. These, in turn affect the individual's job search intentions. There are two types of push variables used in this study: (1) Individual and (2) Environmental. Skill and perceived competitiveness are individual variables. Prior occupational demand, regional, and current demand are all environmental variables. Information search is influenced by many variables including the perceptions of the individual about his/her occupation.

Push Variables. Flores (1984) used several items to measure the individual's perceptions relating to the push variables.

The individual's skill level was assessed by asking him/her to list the present skill level in one of seven categories. Skill levels ranged from a low of 1 to a high of 9.

The individual's perception of his/her competitiveness on the open job market was measured by asking: "How competitive do you feel you would be on the open job market?" Responses ranged from (1) I would be highly competitive to (5) I would be at a severe competitive disadvantage.

The individual's Air Force Specialty Code (AFSC) was determined by asking the individual to mark one of twenty possible responses representing the various career fields studied. These responses were then grouped into high and low demand career fields to obtain a categorical variable representing the prior occupational demand for a given specialty.

The individual's perception of general economic conditions was measured by asking: "What is your impression of the impact of today's general economic condition in relation to job hunting for your career specialty?" Response choices ranged from (1) occupational demand for my specialty is insensitive to economic conditions to (5) occupational demand for my specialty is very sensitive to economic conditions--I doubt I could find the job I wanted in unfavorable economic conditions.

The individuals perception of the current demand for his/her particular occupation was measured by asking: "Compared to other career fields, what do you feel is the current demand for your occupation in civilian employment"? Responses ranged on a verbally anchored 6-point scale from (1) very good to (6) no demand.

The individual's perception of the regional demand for his/her occupation was measured by asking: "How easy would it be for you to get a job in a location where you would prefer to work"? Responses ranged on a 5-point scale from (1) very easy to (5) very difficult.

The individual's persistence in searching for information on available jobs was measured by asking: "How often would you say that you look at advertising in trade or professional journals, magazines, newspapers, etc., to find a civilian job in your current career field"? Responses ranged between (1) I have never looked at advertisements for civilian jobs that are comparable to my current AFSC to (7) I always look at advertisements for civilian jobs that are comparable to my current AFSC.

#### Psychological Attachment to the Organization ("Pulls").

This study considers pulls as attractions to remain with the organization. Three types of variables that attract the individual to stay with the organization include: (1) mobility variables; (2) organizational and social variables; (3) and internal opportunities.

The mobility variables are represented in this effort by age and tenure. As mentioned earlier, it is hypothesized that the older an individual is and the more tenure he/she has, the less likely he/she will develop search or quit intentions. Older employees are less mobile; they have greater investment in their present organization. Therefore, they have more to lose by moving.

The organizational and social variables are represented by the benefits and compensation of the job, one's sense of accomplishment on the job, and the social support one receives from family and friends encouraging retention of the current work role.



Internal opportunities represent the opportunities within the organization for cross-training, advancement, or lateral movement open to the individual. Greater internal opportunities afford an employee a safety valve which may reduce the likelihood of actual separation.

Higher scores on the "pulls" were predicted to result in a decrease in the likelihood that an individual would develop search or quit intentions.

Pull Variables. Flores (1984) used several items to measure the individual's perceptions of the "pulls." Measures of age and tenure were used as indicators of the mobility of the individual (Mobley et al., 1978). Flores (1984) requested information on the Air Force enlistee's age and the total time each individual had spent on active duty. Both variables contained seven ordinal response alternatives.

The differences between military and civilian pay, allowances, and benefits were assessed by asking: "How do you think the total package of military pay, allowances, and benefits compares with pay and benefits for civilian employment for similar work"? Responses were scaled on a verbally anchored 5-point scale from (1) military compensation and benefits far exceed that of civilian employment to (5) civilian compensation and benefits far exceed that of military compensation and benefits.

The potential sense of accomplishment from the job was measured by asking: "Do you feel your sense of accomplishment would be higher in civilian employment?" Responses were (1) yes and (2) no.

Flores examined the influence of family and friends on turnover by asking the participant to express agreement/disagreement with the following statement: "Family and/or friends openly encourage me to pursue a career in the Air Force". Responses ranged on a verbally anchored 7-point scale from (1) strongly disagree to (7) strongly agree.

The internal organizational opportunities examined the individual's feelings regarding seeking an alternative job within the Air Force by asking: "Opportunities such as crosstraining into another AFSC or short-term career broadening assignment are better alternatives than leaving the Air Force" (p. 35-36). Responses ranged on a 7-point verbally anchored scale from (1) strongly disagree to (7) strongly agree.

Alternative Job Prospects. Flores used a series of questions to measure respondents' feelings regarding existing job offers, expected job offers and how the individual's perceptions of the economy relate to his/her perception of alternative job opportunities.

The perception of the availability of alternative jobs was measured directly by asking: "How easy would it be for

you to get another job"? Responses ranged on a verbally anchored rating scale between (1) very easy and (5) very difficult.

The number of expected job offers was measured by asking: "If you were to enter the civilian job market, how many organizations do you believe you would receive job offers from"? Responses ranged from (1) none to (7) over ten.

The last item tried to determine how many current job offers the individual had received by asking: "Within the past year, how many job offers or 'feelers' (i.e., possible job opportunities) in the civilian job market have you had"? Responses ranged from (1) none to (7) over ten.

Intent to Search and Intent to Quit. Flores used a five point rating scale to measure an individual's intent to search and intent to quit.

Flores' survey measured intent to search by asking: "Do you intend to look for civilian employment during the coming year"? Responses ranged from (1) very unlikely to (5) very likely.

Flores' survey measured intent to quit by asking: "Which of the following best tells how you feel about a career in the Air Force"? Responses ranged from (1) I definitely intend to remain with the Air Force to (5) I definitely intend to separate from the Air Force.

Reenlistment Decisions (i.e., Turnover). Turnover data were collected by MPC on all individuals eligible for reenlistment. By using only those eligible for reenlistment for the calculation of the turnover statistics, it was assured that only voluntary turnover would be considered. The reenlistment/separation decision was coded with a separation = 0 and reenlistment = 1.

19 of the respondents extended their first enlistment, rather than reenlisting or separating, and as data was not available for 2 other individuals, the sample of individuals actually confronted with a reenlistment or separation decision was reduced from 452 to 431. Additionally, since only voluntary turnover or reenlistment was of interest to this study, 18 individuals who were separated from the service involuntarily were excluded from the turnover computations. Hence, complete data were available on 413 cases.

### Analyses

Initial Data Analyses. The initial data analyses were accomplished by using Pearson correlation coefficients. The Pearson correlation coefficient ( $r$ ) was used to measure the strength of the relationships between the data Flores (1984) had obtained with respect to survey variables and the data collected for this thesis with respect to the individuals decision to reenlist or separate from military service.

Stepwise Regression Analysis. Hierarchical regression analysis was used to test the hypothetical model illustrated in Figure 7. Variables were clustered and entered in groups to predict outcomes (i.e., intent to search, intent to quit, actual turnover) to which the model predicts they give rise.

#### IV. Results

This chapter presents the results from the statistical analyses performed to test the model and hypotheses proposed in chapter II. First, the descriptive statistics and intercorrelation matrices for the entire sample, low attrition, and high attrition groups will be presented. Secondly, the results of the tests of each of the hypotheses will be presented.

##### Basic Statistics

Descriptive statistics. Table IV contains descriptive statistics for the entire sample. Table V provides descriptive statistics for the low attrition group only, while Table VI contains descriptive statistics for the high attrition group. The results of the descriptive statistics analysis for the total sample revealed much about the composition of the sample: (1) the average age of the respondents was 25-26 years old; (2) the average skill level was 5; (3) and the average length of time in the service was 4-6 years.

Intercorrelation matrices. Table VII presents the intercorrelation matrix for the total sample. There were 12 significant bivariate correlations between survey variables and turnover. Turnover was correlated with: the intention to quit ( $r = -.68$ ); intention to search ( $r = -.54$ ); internal

TABLE IV

## Descriptive Statistics for the Total Sample

<u>Variable</u>	<u>M</u>	<u>SD</u>	<u>N</u>
Age	1.69	1.14	452
Skill Level	3.02	0.91	445
Tenure	2.60	0.60	452
Benefits and Compensation	3.28	1.30	452
Perceived Alternatives	2.40	1.08	452
Intent to Quit	3.14	1.34	452
Current Demand	2.48	1.27	451
Competitiveness	2.06	0.95	450
Expected Offers	2.07	0.95	450
General Economic Conditions	2.42	1.05	449
Existing Offers	1.77	1.17	450
Regional Demand	2.37	1.02	450
Information Search	3.59	2.00	449
Internal Options	4.86	1.91	450
Sense of Accomplishment	1.41	0.51	450
Social Support	4.16	1.99	452
Intention to Search	3.30	1.52	452
Turnover	0.58	0.49	413

TABLE V

## Descriptive Statistics for the Low Attrition Group

<u>Variable</u>	<u>M</u>	<u>SD</u>	<u>N</u>
Age	1.95	1.26	222
Skill Level	2.80	0.96	217
Tenure	2.86	0.55	222
Benefits and Compensation	3.44	1.25	222
Perceived Alternatives	2.46	1.04	222
Intent to Quit	3.03	1.29	222
Current Demand	2.72	1.36	221
Competitiveness	2.20	0.99	221
Expected Offers	2.85	1.43	221
Sense of Accomplishment	1.41	0.53	221
General Economic Conditions	2.57	1.11	221
Existing Offers	1.72	1.11	222
Regional Demand	2.46	1.09	220
Information Search	3.63	2.02	220
Internal Options	5.04	1.74	221
Social Support	4.34	1.99	222
Intention to Search	3.19	1.55	222
Turnover	0.64	0.48	210



TABLE VI

## Descriptive Statistics for the High Attrition Group

<u>Variable</u>	<u>M</u>	<u>SD</u>	<u>N</u>
Age	1.44	0.94	230
Skill Level	3.24	0.82	228
Tenure	2.36	0.54	230
Benefits and Compensation	3.12	1.33	230
Perceived Alternatives	2.35	1.11	230
Intent to Quit	3.25	1.38	230
Current Demand	2.25	1.13	230
Competitiveness	1.94	0.90	229
Expected Offers	3.10	1.48	230
Sense of Accomplishment	1.41	0.49	229
General Economic Conditions	2.27	0.96	228
Existing Offers	1.82	1.23	228
Regional Demand	2.27	0.94	230
Information Search	3.55	1.97	229
Internal Options	4.68	2.05	229
Social Support	3.98	1.98	230
Intention to Search	3.40	1.48	230
Turnover	0.52	0.50	203

options ( $r = .35$ ); social support ( $r = .34$ ); perceived alternatives ( $r = .31$ ); existing offers ( $r = -.29$ ); regional demand ( $r = .26$ ); sense of accomplishment ( $r = .24$ ); propensity to search for information ( $r = -.21$ ); expected offers ( $r = -.18$ ); perceived competitiveness in the external job market ( $r = .17$ ); and benefits and compensation ( $r = -.16$ ). As predicted, the intention to quit yielded the highest point-biserial correlation with turnover.

Several key "pull" variables were significantly correlated with turnover as the model predicted. Internal options, social support, sense of accomplishment, and benefits and compensation all were significantly related to reenlistment decisions.

Several key "push" variables also were significant. These included perceived alternatives, existing offers, regional demand, willingness to search for available information, expected offers, and perceived competitiveness.

Table VIII presents the intercorrelations for the subgroup of the sample from low attrition AFSCs. There were 11 significant correlations with turnover for this group. Turnover was correlated with: the intention to quit ( $r = -.68$ ); intention to search ( $r = -.45$ ); internal options ( $r = .36$ ); social support ( $r = .32$ ); existing offers ( $r = -.27$ ); regional demand ( $r = .25$ ); sense of accomplishment ( $r = .25$ ); willingness to search for

TABLE VII  
Intercorrelation Matrix for Total Sample

VARIABLE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Age																	
2. Skill	.12																
3. Tenure	.28	.02															
4. Benefits and Compensation	.09	.00	.22														
5. Perceived Alternatives	-.05	-.08	.00	-.23													
6. Intent to Quit	-.06	.10	.02	.28	-.34												
7. Current Demand	-.03	-.07	.01	-.10	.26	-.09											
8. Competitiveness	.00	-.04	.05	-.13	.36	-.11	.37										
9. Expected Offers	.08	.13	.09	.30	-.43	.18	-.38	-.38									
10. Sense of Accomplishment	.00	.01	.01	-.16	.21	-.37	.05	.04	-.08								
11. General Economic Conditions	-.06	-.05	.00	-.14	.35	-.09	.38	.29	-.33	.08							
12. Existing Offers	.03	.05	.09	.21	-.23	.29	-.23	-.29	.48	-.08	-.21						
13. Regional Demand	-.05	.00	.05	-.15	.54	-.26	.23	.37	-.31	.22	.37	-.23					
14. Information Search	.05	.00	.17	.22	-.26	.24	-.20	-.16	.25	-.24	-.17	-.21	-.16				
15. Internal Options	-.02	-.14	.05	-.24	.23	-.46	.10	.10	-.11	.27	.11	.37	-.03	-.15			
16. Social Support	-.03	-.06	-.02	-.23	.09	-.43	.01	.05	-.04	.21	-.04	.39	-.02	-.10	.34		
17. Intent to Search	-.07	.05	-.02	.20	-.27	.59	-.10	.18	.18	-.29	-.15	.29	-.21	.28	-.26	-.27	
18. Turnover	.05	-.08	.01	-.16	.31	-.68	.06	.17	-.18	.24	.08	-.29	.26	-.21	.35	.34	-.54

Note: Correlations exceeding 0.10 are significant at  $p < .05$  and correlations exceeding .13 are significant at  $p < .01$ .

information ( $\underline{r} = -.25$ ); perceived alternatives ( $\underline{r} = .21$ ); benefits and compensation ( $\underline{r} = -.11$ ); and perceived competitiveness in the external job market ( $\underline{r} = .10$ ). Expected offers did not correlate significantly with turnover in the low attrition group, but this variable was significantly correlated with turnover for the total sample and the high attrition group.

Table IX presents the intercorrelations for the subgroup from the high attrition AFSCs. For this subsample there were 14 significant correlations between survey measures and turnover, including the following significant turnover correlates: the intention to quit ( $\underline{r} = -.68$ ); intention to search ( $\underline{r} = -.62$ ); perceived alternatives ( $\underline{r} = .38$ ); social support ( $\underline{r} = .34$ ); internal options ( $\underline{r} = .33$ ); expected offers ( $\underline{r} = -.31$ ); existing offers ( $\underline{r} = -.30$ ); regional demand ( $\underline{r} = .25$ ); sense of accomplishment ( $\underline{r} = .23$ ); benefits and compensation ( $\underline{r} = -.23$ ); perceived competitiveness in the external job market ( $\underline{r} = .21$ ); skill level ( $\underline{r} = -.20$ ); search for information ( $\underline{r} = -.16$ ); and current demand ( $\underline{r} = .11$ ). Two variables that were significantly correlated with turnover in the high attrition group, but not for the total sample, were the current demand for an individual's occupation and the skill level of the individual.

TABLE VIII  
Intercorrelation Matrix for Low Attrition Group

VARIABLE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Age																	
2. Skill	.14																
3. Tenure	.22	.28															
4. Benefits and Compensation	-.08	-.04	.10														
5. Perceived Alternatives	-.02	.03	.01	-.09													
6. Intent to Quit	-.12	-.01	.07	.30	-.25												
7. Current Demand	-.13	.03	-.12	.02	.13	.00											
8. Competitiveness	.00	.02	.05	-.12	.26	-.07	.36										
9. Expected Offers	.02	.04	.11	.17	-.35	.06	-.40	-.39									
10. Sense of Accomplishment	.02	.04	.02	-.10	.16	-.33	-.03	.02	.05								
11. General Economic Conditions	-.12	.05	-.06	-.13	.28	-.08	.34	.30	-.41	.05							
12. Existing Offers	.00	-.06	.05	.11	-.39	.26	-.18	-.27	.43	.02	-.29						
13. Regional Demand	-.13	.05	-.06	-.11	.51	-.20	.19	.33	-.28	.17	.39	-.25					
14. Information Search	.04	-.04	.19	.18	-.26	.29	-.18	-.13	.18	-.23	-.18	.23	-.18				
15. Internal Options	-.03	-.05	-.01	-.22	.07	-.46	-.04	.00	.03	.24	-.01	-.14	.07	-.15			
16. Social Support	.02	-.02	-.11	-.24	.03	-.42	-.07	.02	.11	.18	-.09	-.12	.09	-.07	.42		
17. Intent to Search	-.13	-.11	-.04	.19	-.19	.53	-.04	-.18	.07	-.25	-.16	.22	-.20	.30	-.25	-.22	
18. Turnover	.07	.08	-.01	-.11	.21	-.68	-.02	.10	-.03	.25	.05	-.27	.25	-.25	.36	.32	-.45

Note. Correlations exceeding 0.10 are significant at  $p < .05$  and correlations exceeding .13 are significant at  $p < .01$ .

TABLE IX  
Intercorrelation Matrix for High Attrition Group

VARIABLE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Age																	
2. Skill	.27																
3. Tenure	.21	-.02															
4. Benefits and Compensation	.25	.11	.25														
5. Perceived Alternatives	-.11	-.17	-.06	-.37													
6. Intent to Quit	.06	.18	.06	.29	-.41												
7. Current Demand	.01	-.11	-.02	-.28	.40	-.17											
8. Competitiveness	-.06	-.03	-.06	-.18	.45	-.13	.34										
9. Expected Offers	.21	.19	.17	.43	-.50	.26	-.35	-.36									
10. Sense of Accomplishment	-.03	-.02	.00	-.22	.26	-.43	.15	.06	-.21								
11. General Economic Conditions	-.05	-.08	-.06	-.20	.42	-.09	.40	.25	-.24	.11							
12. Existing Offers	.09	.15	.19	.31	-.38	.31	-.28	-.30	.52	-.17	-.12						
13. Regional Demand	.00	-.02	.10	-.22	.56	-.30	.25	.39	-.35	.29	.32	-.21					
14. Information Search	.06	.05	.16	.26	-.27	.20	-.25	-.20	.32	-.25	-.17	.32	-.14				
15. Internal Option	-.05	-.19	.03	-.29	.35	-.45	.22	.18	-.21	.30	.21	-.18	.24	-.16			
16. Social Support	-.15	-.06	-.02	-.24	.14	-.43	.07	.07	-.16	.25	.01	-.12	.15	-.14	.28		
17. Intent to Search	.05	.19	.06	.23	-.34	.64	-.15	-.16	.29	-.34	-.14	.34	-.21	.27	-.27	-.31	
18. Turnover	-.05	-.20	-.09	-.23	.38	-.68	.11	.21	-.31	.23	.08	-.30	.25	-.16	.33	.34	-.62

Note: Correlations exceeding 0.10 are significant at  $p < .05$  and correlations exceeding .13 are significant at  $p < .01$ .

### Regression Analysis

Stepwise regression analyses were performed to evaluate the logic of the model presented in Figure 7 and hypotheses derived from the model.

Test of Hypothesis 1. Hypothesis 1 predicted that the immediate antecedents of behavior (the intention to search and the intention to quit) will be significant predictors of turnover. Stepwise regression analyses were performed to determine which variables would enter significantly as predictors of turnover. The first analysis was performed regressing turnover on all of the model variables. Table X presents the results of this analysis.

There were two variables that entered as significant predictors of turnover: the intention to quit ( $\Delta R^2 = .49$ ;  $p < .001$ ) and the intention to search ( $\Delta R^2 = .03$ ;  $p < .001$ ). Collectively, these two variables accounted for 52% of the variance in the reenlistment criterion. This finding supports research hypothesis 1 and conceptual arguments advanced by Mobley (1977), Price and Mueller (1981), Mowday et al. (1982), and Steel and Ovalle (1984) that behavioral intentions to stay/leave were the most immediate predictors of turnover.

Test of Hypothesis 2. Hypothesis 2 predicted that positive perceptions of available alternatives will have a significant positive effect on turnover. Table XI presents

TABLE X

Results of Stepwise Regression Analysis for the Predictors  
of Turnover

Predictor	Beta	R <sup>2</sup>	$\Delta R^2$
Intention to Quit	.57	.49	.49***
Intention to Search	.22	.52	.03***

\*\*\* p < .001



the results of a stepwise regression of all variables, except behavioral intentions, predicting turnover. There were five variables that entered significantly as predictors of turnover: internal opportunities ( $\Delta R^2 = .13$ ); existing offers ( $\Delta R^2 = .06$ ); social support ( $\Delta R^2 = .04$ ); perceived alternatives ( $\Delta R^2 = .02$ ); and sense of accomplishment ( $\Delta R^2 = .01$ ).

Perceived alternatives, internal opportunities, and existing offers from external organizations entered as significant predictors of turnover when behavioral intentions were not included in the analysis. This result supports hypothesis 2 which predicted that positive perceptions of available alternatives would have a positive effect on turnover. These findings also agree with findings of earlier studies by Mobley et al. (1979), Miller et al. (1979), Mowday et al. (1982), and Michaels and Spector (1982). They are also consistent with the theoretical work of March and Simon (1958), Price (1977), Mobley (1977), Jackofsky (1984), and Hulin et al. (1985).

The strong relationship obtained between internal opportunities and turnover further supports conceptual work by Jackofsky and Peters (1983). They hypothesized that the presence of internal options would significantly reduce turnover behavior. Additionally, support from family or friends to make the military a career and the sense of

TABLE XI

Results of Stepwise Regression Analysis for the Predictors  
of Turnover (excluding Behavioral Intentions)

Predictor	Beta	$R^2$	$\Delta R^2$
Internal Opportunities	.18	.13	.13***
Existing Offers	.17	.18	.06***
Social Support	.20	.22	.04***
Perceived Alternatives	.15	.25	.02**
Sense of Accomplishment	.12	.26	.01**

\*\*  $p < .01$

\*\*\*  $p < .001$

accomplishment on the job entered as significant, negative predictors of turnover.

Test of Hypothesis 3. Hypothesis 3 predicted that positive perceptions of alternative job prospects (i.e., perceived alternatives and expected job offers), the intention to search, and negative perceptions of internal opportunities for movement, will positively affect the individual's intention to quit. Table XII presents the results of the stepwise regression analysis on the predictors of the intention to quit. There were five variables that entered significantly in the prediction of the intention to quit: intention to search ( $\Delta R^2 = .35$ ); internal opportunities ( $\Delta R^2 = .10$ ); social support ( $\Delta R^2 = .04$ ); perceived alternatives ( $\Delta R^2 = .02$ ); and sense of accomplishment ( $\Delta R^2 = .02$ ). As hypothesis 3 and the proposed model predicted, the intention to search (the immediate antecedent of intention to quit), internal opportunities, and perceived alternatives entered as significant predictors of the intention to quit. However, existing offers did not enter as predicted.

Since the intent to search is the immediate antecedent of the intent to quit and was expected to enter as the best predictor of this intention, another stepwise regression was performed to determine the significant predictors of the

TABLE XII

Results of Stepwise Regression Analysis for the Predictors  
of the Intention to Quit

Predictor	Beta	$R^2$	$\Delta R^2$
Intention to Search	.40	.35	.35***
Internal Opportunities	.22	.45	.10***
Social Support	.20	.49	.04***
Perceived Alternatives	.13	.51	.02***
Sense of Accomplishment	.13	.52	.02***

\*\*\*  $p < .001$

intention to quit in the absence of the intention to search.

Table XIII presents the results of the stepwise regression of variables (excluding the intention to search) utilized to predict the intention to quit. There were six variables that entered significantly: internal opportunities ( $\Delta R^2 = .21$ ); social support ( $\Delta R^2 = .08$ ); perceived alternatives ( $\Delta R^2 = .06$ ); sense of accomplishment ( $\Delta R^2 = .04$ ); existing offers ( $\Delta R^2 = .01$ ); and age, ( $\Delta R^2 = .01$ ). All three variables hypothesized to significantly predict the intention to quit did so when the intention to search was removed. Additionally, three other variables, social support, sense of accomplishment, and age all entered significantly into the prediction equation. Internal opportunities entered as the best predictor in this analysis which is consistent with Jackofsky and Peters' (1983) model.

Test of Hypothesis 4. Hypothesis 4 predicted that negative perceptions of benefits and compensation, sense of accomplishment, social support, and the individual's mobility (age, tenure), and positive perceptions of alternative job prospects, information search, and existing offers would positively affect the intent to search. Table XIV presents the results of a stepwise regression of all antecedent variables against the intention to search. There were six variables that entered significantly: sense of accomplishment ( $\Delta R^2 = .08$ ); existing offers ( $\Delta R^2 = .07$ );

TABLE XIII

Results of Stepwise Regression Analysis for the Predictors  
of the Intention to Quit (excluding Intention to Search)

Predictor	Beta	R <sup>2</sup>	$\Delta R^2$
Internal Opportunities	.25	.21	.21***
Social Support	.27	.29	.08***
Perceived Alternatives	.17	.35	.06***
Sense of Accomplishment	.21	.39	.04***
Existing Offers	.13	.40	.01**
Age	.09	.41	.01*

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

social support ( $\Delta R^2 = .04$ ); information search ( $\Delta R^2 = .02$ ); perceived alternatives ( $\Delta R^2 = .01$ ); and age ( $\Delta R^2 = .01$ ). Sense of accomplishment, social support, and one measure of mobility (i.e., age) entered as significant predictors of the intention to search. These results support hypothesis 4 and earlier work performed by Mobley (1982) and Jackofsky and Peters (1983) on the relationship between the sense of accomplishment on the job and heightened job attachment.

Test of Hypothesis 5. Hypothesis 5 predicted that negative perceptions of pull variables and positive perceptions of push variables will positively affect the intent to search. Table XV presents the results of a stepwise hierarchical regression of the groups of variables proposed in the model against the intention to search. If one variable from a group entered as a significant predictor, the group's relationship with the intention to search was construed as supported. There were eight variables that entered significantly into the prediction equation: regional demand ( $\Delta R^2 = .05$ ); information search ( $\Delta R^2 = .05$ ); social support ( $\Delta R^2 = .05$ ); existing offers ( $\Delta R^2 = .03$ ); sense of accomplishment ( $\Delta R^2 = .02$ ); perceived alternatives ( $\Delta R^2 = .01$ ); perceived competitiveness ( $\Delta R^2 = .01$ ); and age ( $\Delta R^2 = .01$ ).

These results support hypothesis 5 and earlier work by Mobley (1982), Mobley et al. (1979), and Mowday et al.

TABLE XIV

Results of Stepwise Regression Analysis for the Predictors  
of Intention to Search

Predictor	Beta	R <sup>2</sup>	$\Delta R^2$
Sense of Accomplishment	.17	.08	.08***
Existing Offers	.16	.15	.07***
Social Support	.19	.19	.04***
Information Search	.14	.21	.02***
Perceived Alternatives	.01	.22	.01**
Age	.09	.23	.01*

\* p < .05

\*\* p < .01

\*\*\* p < .001



(1982) on the relationship between the "pull" variables and behavioral intentions. These results also agree with work by Jackofsky and Peters (1983), Jackofsky (1984), and Mobley (1982) on the influence of an individual's perception of his/her competitiveness (ability and performance) on turnover plans.

Information search and regional demand entered significantly as predictors of the intent to search. These relationships are suggested by the work of Hulin et al. (1985) on regional demand's relationship to behavioral intent. They also converge with the views of Mowday et al. (1982) on the role of information in the turnover process.

Test of Hypothesis 6. Hypothesis 6 predicted that positive perceptions of prior occupational demand, general economic conditions, perceived competitiveness (personal competitiveness and skill level), perceived demand (current demand and regional demand), and information search would positively influence alternative job prospects and existing offers. There were three stepwise regressions performed to test the proposed model's ability to predict how individual's perceive alternative job prospects. First, all push variables were regressed against perceived alternatives. Secondly, the push variables were regressed against expected offers. Finally, the push variables were employed to predict existing offers.

TABLE XV

Results of Stepwise Hierarchical Regression Analysis with  
the Push and Pull Groups as Predictors of the Intention to  
Search

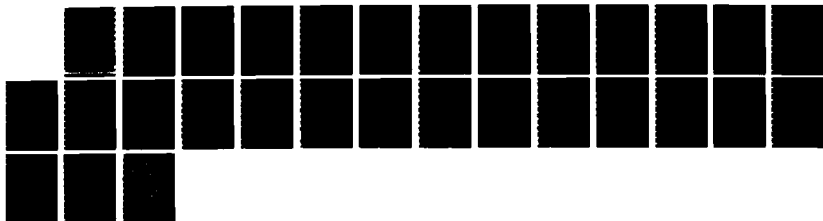
Predictor	Beta	R <sup>2</sup>	$\Delta R^2$
Regional Demand	.03	.05	.05***
Perceived Competitiveness	.05	.06	.01**
Information Search	.14	.11	.05***
Existing Offers	.15	.14	.03**
Perceived Alternatives	.10	.15	.01*
Social Support	.19	.20	.05***
Sense of Accomplishment	.017	.22	.02**
Age	.09	.23	.01*

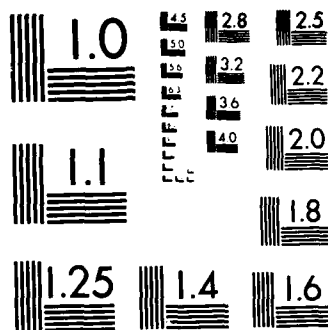
\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

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The results of the stepwise regression of push variables predicting perceived alternatives are presented in Table XVI. There were four variables that entered significantly in this equation: regional demand ( $\Delta R^2 = .30$ ); information search ( $\Delta R^2 = .03$ ); perceived competitiveness ( $\Delta R^2 = .02$ ); and general economic conditions ( $\Delta R^2 = .01$ ).

The results of the stepwise regression of push variables on expected offers are presented in Table XVII. Six variables entered significantly in this analysis: perceived competitiveness ( $\Delta R^2 = .14$ ); current demand ( $\Delta R^2 = .06$ ); regional demand ( $\Delta R^2 = .03$ ); information search ( $\Delta R^2 = .02$ ); skill level ( $\Delta R^2 = .01$ ); and general economic conditions ( $\Delta R^2 = .01$ ).

The results of the stepwise regression analysis for the predictors of existing offers are shown in Table XVIII. Three variables entered significantly: perceived competitiveness ( $\Delta R^2 = .08$ ); information search ( $\Delta R^2 = .06$ ); and regional demand ( $\Delta R^2 = .01$ ).

These results support hypothesis 6 and earlier work done on regional demand (Mobley, 1982), information search (Mowday et al., 1983), perceived competitiveness (Jackofsky & Peters, 1983; Jackofsky, 1984; Mowday et al., 1983; Mobley, 1982), and general economic conditions (March & Simon, 1958; Price, 1977; Hulin et al. 1985).

TABLE XVI

Results of Stepwise Regression Analysis for the Predictors  
of Perceived Alternatives

Predictor	Beta	R <sup>2</sup>	$\Delta R^2$
Regional Demand	.42	.30	.30***
Information Search	.15	.33	.03***
Perceived Competitiveness	.14	.35	.02***
General Economic Conditions	.12	.36	.01**

\*\* p < .01

\*\*\* p < .001

TABLE XVII

Results of Stepwise Regression Analysis for the Predictors  
of Expected Offers

Predictor	Beta	R <sup>2</sup>	$\Delta R^2$
Perceived Competitiveness	.20	.14	.14***
Current Demand	.19	.20	.06***
Regional Demand	.13	.23	.03***
Information Search	.15	.25	.02***
Skill	.10	.26	.01**
General Economic Conditions	.11	.27	.01**

\*\* p < .05

\*\*\* p < .001

TABLE XVIII

Results of Stepwise Regression Analysis for the Predictors  
of Existing Offers

Predictor	Beta	R <sup>2</sup>	$\Delta R^2$
Perceived Competitiveness	.20	.08	.08***
Information Search	.22	.14	.06***
Regional Demand	.12	.15	.01**

\*\* p < .05

\*\*\* p < .001

## V. Discussion and Conclusions

This study reviewed four turnover models and empirical research that incorporated and tested the perceived alternatives-turnover linkage. The models reviewed were developed by March and Simon (1958), Price (1977), Mobley et al. (1979), and Mowday et al. (1982).

There are several key points that should be stressed with respect to these models. First, Price (1977) regards satisfaction and opportunity as key intervening variables consistent with Mobley et al.'s (1979) view of employment/unemployment and quit rate relationships. These arguments are also consistent with March and Simon's (1958) analysis of the turnover process based on the perceived ease of movement and Mowday et al.'s (1982) premis that turnover is a direct result of the perceived available alternatives and economic conditions. Secondly, more recent turnover models (i.e., Mobley et al., 1979; Mowday et al., 1982) have incorporated a belief-attitude-intention-behavior network showing intentions as the immediate antecedents of behavior.

There are two significant similarities among these models. First, contemporary models recognize the importance of behavioral intentions as a critical linkage between attitudes (job dissatisfaction, etc.) and behavior (turnover). Secondly, all of the models consider the perceived availability of alternatives as directly



influencing turnover or intentions. Therefore, there appears to be consensus among the leading turnover theorists regarding the influence of affective responses, such as job satisfaction or dissatisfaction, coupled with a perception of opportunity (e.g., ease of movement, availability of acceptable alternatives) leading to the individual's decision to quit or stay.

Based on this review a multivariate model highlighting the effects of job market demand effects on the turnover process was proposed. This model was intended to improve upon previous perceived alternatives-turnover frameworks by including a diverse set of variables that were thought to contribute to the formation of the perception of the availability of alternative jobs and job search processes.

This was accomplished by identifying several key variables thought to have a significant influence on the development of perceived alternative jobs. Interrelationships between these variables were depicted in the proposed model (Figure 7).

#### Analysis of Proposed Model

The results of this longitudinal, follow-on study to Flores' (1984) thesis provided support for the proposed model. Significant relationships were found between: (1) behavioral intentions and turnover; (2) perceived alternatives, expected offers, existing offers and the intentions to search and quit and actual reenlistment; (3)

organizational detachment ("push") variables and perceived alternatives, expected offers, and existing offers; (4) internal opportunities and the intention to quit; (5) and organizational attachment ("pull") variables and the intention to search.

The first hypothesis predicted that behavioral intentions would be significant predictors of turnover. This hypothesis accurately predicted this relationship as only the intention to quit and the intention to search entered as significant predictors when all variables were regressed against turnover. Mobley et al. (1979) stated that generally "less than 20% of the variance in turnover is explained" (p. 493). These variables accounted for 52% of the variance in reenlistment criteria, which compares favorably with routine findings in this area (Mobley et al., 1979). These results supported hypothesis 1.

The second hypothesis predicted that perceived alternatives would be a significant predictor of turnover when behavioral intentions were excluded from the analysis. This hypothesis was supported. Perceived alternatives entered as significant predictors in this analysis. Several other variables also entered significantly. The internal opportunities available to the individual, the existing offers from civilian organizations, social support to remain with the present organization, and sense of accomplishment on the job were all related significantly to turnover in this analysis.

The third hypothesis predicted that alternative job prospects, internal opportunities, and the intention to search would all be significantly related to the intent to quit. This hypothesis was supported by the results. All variables in the analysis entered the equation significantly as predictors of the intention to quit. The intention to search, the variable immediately adjacent to the intention to quit, produced the strongest relationship with the intent to quit, supporting the model. Further, the significant relationship obtained between perceived alternatives and the intention to quit agrees with earlier work by Mobley et al. (1979), who reported that the "expectancy of finding an acceptable alternative position was significantly and positively related to the intention to quit" (p. 505).

The fourth hypothesis predicted that the immediate antecedents of the intention to search would be significant predictors of it. This hypothesis was partially supported, but expected offers and benefits and compensation did not enter as predicted.

The fifth hypothesis predicted that negative perceptions of organizational attachment factors ("pulls") and positive perceptions of organizational detachment factors ("pushes") would significantly influence the intent to search. This hypothesis was largely supported. Variables from these groupings entered significantly as predictors of the intent to search.

The sixth hypothesis predicted that positive evaluations of organizational detachment factors (i.e., "pushes") would foster a developing sense of alternative employment prospects (expected job offers and the perceived alternatives) and would be more likely to result in existing job offers. These predicted relationships were supported. However, some of the variables in these groups, including prior occupational demand, general economic conditions, skill level, and current demand did not significantly enter into the regression equation predicting alternative employment prospects.

Three variables entered as significant predictors of existing offers. An individual's perceived competitiveness, information search, and the regional demand for one's occupational specialty were the predictor variables significantly related to this criterion. These relationships are congruent with earlier arguments by Mowday et al. (1982) and Stumpf and Hartman (1984) on the impact of information searches on one's perceptions of employment options; Jackofsky and Peters (1983) views on the influence of ability (i.e., competitiveness) on turnover decisions; and with Hulin et al.'s (1985) work on the implications of regional demand for the individual's overall evaluation of perceived alternative employment prospects.

Overall, reasonable support for the model's implications was obtained. Variables such as information

search, perceived competitiveness, and perceived demand appear to be significant influences on the development of beliefs about the existence of alternative job prospects (both perceived alternatives and expected job offers). Internal opportunities appear to be a significant factor in the individual's development of the intention to quit or stay. Further, other organizational attachment ("pulls") factors appear to significantly influence the development of search intentions and behavior. Finally, as the model predicted, behavioral intentions were strongly related to actual turnover.

#### Comparison of Present Findings and Previous Research

Previous researchers have obtained mixed results when attempting to investigate the relationship between perceived alternatives and behavioral intentions and turnover. Mobley et al. (1978) failed to obtain support for such a linkage. Martin (1979) and Michaels and Spector (1982) obtained only weak support for such a relationship. The equivocal results in this area of study may be attributable, in part, to the utilization of univariate measures of perceived alternatives.

However, researchers such as Miller et al. (1979), Meola and Koechel (1983), and Stumpf and Hartman (1984), using more than one item to represent perceived alternatives, obtained better results. Therefore, it appears that a multivariate approach to the

conceptualization and measurement of perceived alternatives has advantages. It may result in stronger perceived alternatives-turnover relationships.

The present study used a multivariate approach in representing the relationship between perceived alternatives and turnover. This approach may have contributed to the stronger results. Further, since this was a longitudinal study and since the sample size was large ( $N = 452$ ) the validity of the results may have been enhanced.

#### Significant Variables

The strong relationship obtained between behavioral intentions and turnover is consistent with earlier work and hypotheses presented by Kraut (1975), Fishbein and Ajzen (1972, 1975), Mobley (1977), Mobley et al. (1978), Jackofsky and Peters (1983), Steel and Ovalle (1984), and Hulin et al. (1985) to the effect that behavioral intentions are the best individual predictors of employee turnover.

The regression results between model antecedent variables and intermediate outcome linkages tended, in the main, to support the hypothetical model. These results support earlier work by: Mobley (1977) on the concept of perceived alternatives functioning as an intermediate linkage between affective responses and behavior; Mobley et al. (1978) on the probability of finding an acceptable alternative directly contributing to the formation of behavioral intentions; Mobley et al. (1979) on the influence

of labor market perceptions on alternative job prospects and behavioral intentions/turnover; Miller et al. (1979) on career mobility; Mowday et al. (1982) on the influence of information search on the development of perceptions of perceived alternatives; and Michaels and Spector (1982) on the relationship between perceived alternatives and behavioral intentions. They are also consistent with the theoretical work of March and Simon (1958), Price (1977), Mobley (1977), Jackofsky (1984), and Hulin et al. (1985) arguing strongly for the inclusion of perceived alternative measures in individual turnover research.

The relationships obtained between the push variables and perceived alternatives, expected job offers, and existing job offers seems to justify the utilization of a multivariate approach to studying these variables. The results displayed in Table XV indicate that these three variables (perceived alternatives, expected offers, and existing offers) were all responsive to job market and demand factors.

These results are consistent, in principle, with earlier work on regional demand (Hulin et al., 1985; Mobley, 1982), information search (Mowday et al., 1982; Stumpf & Hartman, 1984), perceived competitiveness (Jackofsky & Peters, 1983; Jackofsky, 1984; Mowday et al., 1982; Mobley, 1982; Stumpf & Hartman, 1984), and general economic conditions (March & Simon, 1958; Price, 1977; Hulin et al. 1985).

The significant relationship between internal opportunities and the intention to quit ( $\Delta R^2 = .10$ ) suggests that internal opportunities have a direct influence on the individual's behavioral intentions and presumably, on their behavior, as well (Jackofsky & Peters, 1983).

The results of the stepwise regression of organizational attachment (pull) variables and the intention to search provide strong support for the proposed model and for previous research (Mobley, 1977) relating job factors to search intentions and (Mobley et al., 1979) relating personal factors (family support and responsibilities, etc.), organizational factors (benefits and compensation, sense of accomplishment, etc.) to the development of the intent to search.

#### USAF Recommendations

Internal opportunities, such as cross training, have a significant effect on the individual's intention to quit. It follows that career guidance counselors may wish to emphasize the vast opportunities within the service during career counseling sessions. This emphasis may, in turn, be perceived as a safety valve or fallback position for the individual contemplating whether or not to separate from the Air Force.

Additionally, the sense of accomplishment on the job, support from family and friends to stay in the service, and age all have a significant effect on the individual's



development of the intention to search and search behavior. Hence, Air Force recruiting and retention specialists may want to focus their efforts in these areas. For example, they may want to emphasize: (1) the Air Force's strong commitment to the family relationship; (2) the job security and possibility of retirement at an early age for older workers; (3) and finally the levels of responsibility and autonomy possible in Air Force jobs compared to those available in civilian employment. These factors could be emphasized through media advertisements and may further help the individual reduce any cognitive dissonance he/she may have about staying in the service.

One factor that did not enter as a significant predictor in the regression analysis of the intent to search, the intent to quit and turnover was the comparison of benefits and compensation between military and civilian life. It follows that pay and benefits do not exert as strong an influence on the individual's intentions and behavior, perhaps, as many are inclined to assume. Obviously, reenlistment bonuses are likely to have a positive impact on retention. However, retention specialists should not neglect non-dollar incentives to reenlist. Dollar-for-dollar they may be more cost effective. However, this does not imply that pay and other compensation can be ignored, as the benefits and compensation measure was significantly correlated with turnover.

Additionally, a set of variables consistently entered as predictors of behavioral intentions and turnover. If these variables (internal opportunities, social support, perceived alternatives, sense of accomplishment, existing offers, age, and information search) could be managed, the effect on the development of the intention to search and quit and subsequent turnover could possibly be minimized.

In summary, the importance of retaining good, qualified enlisted personnel is critical to fulfillment of the Air Force's mission and for the Air Force to obtain a reasonable rate of return on its investment. However, it has been difficult for the Air Force to obtain high retention rates with the all-volunteer force structure. Specifically, Flores (1984) reported that 59% of first term enlistees did not opt for another term of enlistment.

Thus, the Air Force provides the training ground to learn a skill or develop a specialty, and commercial organizations, by offering more money and possibly more status, may lure members from the service, thereby reaping the rewards of this employee development.

The Air Force has spent a considerable amount of money on recruiting, selecting, hiring, training and relocating first term enlistees. If individuals choose to leave, the Air Force is losing a great deal on its initial investment and potentially decreasing its readiness capability, as well.

Therefore, it is critical that Air Force managers and retention specialists recognize the career and individual needs of Air Force enlisted personnel. This attention to career and personal needs through counseling, job placement, job rotation, training, etc., may attenuate search and quit intentions. Further, by emphasizing internal opportunities available to the individual, the attractiveness of externally available alternatives may be lessened.

### Study Limitations

This study obtained comparatively strong results. These results may be attributed to the large sample size, the theoretical grounding of the research, and because this was a longitudinal study. However, just as in any research effort, several limitations existed.

First, the survey used by Flores (1984) did not include a job satisfaction measure. However, since strong emphasis has been placed on the effect of job satisfaction on behavioral intentions and turnover in previous research (Steel and Ovalle, 1984), little was thought to be gained by replicating this relationship. On the other hand, it is difficult to determine the degree to which study variables explain additional criterion variance other than variance redundant with that explained by affective measures.

Secondly, Flores (1984) census sampled individuals in the high attrition and low attrition career fields to maximize the influence of occupational demand on the

respondents. By surveying only the extreme attrition groups, the results may be biased toward one extreme or the other, while a more representative approach may have been to randomly sample all career fields.

Third, the data were collected using a self-report instrument. Stumpf and Hartman (1984) reported that this data gathering technique may increase the possible presence of method and social desirability biases.

Finally, this study evaluated responses and reenlistment/separation decisions of an all Air Force sample. The results obtained by this study may be unique to Air Force (or other military components) due to the unique environmental stimulus the individuals are subjected to. Therefore, extrapolation of these results to the civilian community may not be warranted.

#### Further Research

Further research could add to this study's findings and further bridge the gap in turnover literature regarding the role perceived alternatives play in the turnover process. There are several specific areas where further research could be worthwhile:

1. Perform a longitudinal study on a random sample of Air Force Specialty Codes (AFSCs) to determine whether the present results would replicate on a random sample.

2. Develop a multivariate instrument to measure each of the constructs used in this study. This effort could validate the present model's predictive capability.

3. Explore methods to increase the awareness of individuals regarding the availability of internal opportunities for cross-training or lateral movement.

4. Investigate more fully the role available information plays with respect to the development of perceptions of alternatives and behavioral intentions.

5. Explore cost effective retention methods, such as a widespread advertising campaign, to evaluate its ability to convince: (a) older members to reenlist; (b) members to perceive the availability of internal opportunities as being better than external opportunities; (c) members to critically assess the sense of accomplishment presently received compared with that thought to be available in civilian employment; (c) members that the Air Force provides "A Great Way of Life" for the family as well as the individual.

Appendix: Survey Questionnaire

001. What was your age on your last birthday?

1. Less than 25
2. 25-26
3. 27-28
4. 29-30
5. 31-32
7. Over 34

Questions 002 through 004 involve identifying your current AFSC. Please read through the answers on questions 002, 003, and 004 and mark the appropriate answer by the appropriate number.

002.    1. 113XO  
         2. 242X0  
         3. 302X1  
         4. 341X4  
         5. 392X0  
         6. 552X4  
         7. 591X0

003.    1. 611X0  
         2. 622X0  
         3. 732X4  
         4. 733X1  
         5. 734X0  
         6. 751X2  
         7. 751X3

004.    1. 753X1  
         2. 903X1  
         3. 925X0  
         4. 99500  
         5. 99501  
         6. 99504

005. What is your skill level?

1. 1
2. 3
3. 5
4. 7
5. 9
6. 0
7. Other

006. How much time have you spent on active duty in the military?

1. Less than two years
2. Two but less than four years
3. Four but less than six years
4. Six but less than eight years
5. Eight but less than ten years
6. Ten but less than twelve years
7. Twelve years or more

007. How do you think the total package of military pay, allowances, and benefits compares with pay and benefits for civilian employment for similar work?

1. Military Compensation and benefits far exceed that of civilian employment.
2. Military compensation and benefits slightly exceed that of civilian employment.
3. Military compensation and benefits are about equal to that of civilian employment.
4. Civilian compensation and benefits slightly exceed that of military compensation and benefits.
5. Civilian compensation and benefits far exceed that of military compensation and benefits.

008. If you left the Air Force tomorrow, how easy would it be for you to get another job?

1. Very easy
2. Somewhat easy
3. Neither easy nor difficult
4. Somewhat difficult
5. Very difficult

009. Which of the following best tells how you feel about a career in the Air Force?

1. I definitely intend to remain with the Air Force.
2. I probably will remain with the Air Force.
3. I have not decided whether I will remain with the Air Force.
4. I probably will not remain with the Air Force.
5. I definitely intend to separate from the Air Force.

010. Compared to other career fields, what do you feel is current demand for your occupation in civilian employment?

1. Very good demand
2. Good demand
3. Average demand
4. Poor demand
5. Very poor demand
6. No demand

011. How competitive do you feel you would be on the open job market? Evaluate your qualifications as they would compare with those of other candidates competing for civilian jobs in your field.

1. I would be highly competitive.
2. I would be moderately competitive.
3. I would be somewhat competitive.
4. I would be at a competitive disadvantage.
5. I would be at a severe competitive disadvantage.

012. If you were to enter the civilian job market, how many organizations do you believe you would receive job offers from?

1. None
2. One or two
3. Three or four
4. Five or six
5. Seven or eight
6. Nine or ten
7. Over ten

013. Do you feel your sense of accomplishment would be higher in civilian employment?

1. Yes
2. No

014. What is your impression of the impact of today's general economic conditions in relation to job hunting for your career specialty?

1. Occupational demand for my specialty is insensitive to economic conditions.
2. Occupational demand for my specialty is somewhat sensitive to economic conditions. Job opportunities would not be plentiful, but I could still find the job I wanted in unfavorable economic conditions.
3. I don't know what job hunting would be like in unfavorable economic conditions.



4. Occupational demand for my specialty is sensitive to economic conditions. It would be difficult for me to find the job I wanted in unfavorable economic conditions.
5. Occupational demand for my specialty is very sensitive to economic conditions, I doubt I could find the job I wanted in unfavorable economic conditions.

015. Within the past year, how many job offers or "feelers" (i.e., possible job opportunities) from the civilian job market have you received?

1. None
2. One or two
3. Three or four
4. Five or six
5. Seven or eight
6. Nine or ten
7. Over ten

016. How easy would it be for you to get a job in a location where you would prefer to work?

1. Very easy
2. Somewhat easy
3. Neither easy nor difficult
4. Somewhat difficult
5. Very difficult

017. How often would you say that you look at advertising in trade or professional journals, magazines, newspapers, etc., to find a civilian job in your current career field?

1. I have never looked at advertisements for civilian jobs that are comparable to my current AFSC.
2. I almost never look at advertisements for civilian jobs that are comparable to my current AFSC.
3. I often look at advertisements for civilian jobs that are comparable to my current AFSC.
4. I do not look very often at advertisements for civilian jobs that are comparable to my current AFSC.
5. I do look very often at advertisements for civilian jobs that are comparable to my current AFSC.
6. I almost always look at advertisements for civilian jobs that are comparable to my current AFSC.

7. I always look at advertisements for civilian jobs that are comparable to my current AFSC.

For questions 018, and 019, use the following scale to indicate how much you agree or disagree with each statement. Mark:

1. - if you strongly disagree
2. - if you disagree
3. - if you slightly disagree
4. - if you neither agree or disagree
5. - if you slightly agree
6. - if you agree
7. - if you strongly agree

018. Opportunities such as cross-training into another AFSC or short-term career-broadening assignments are better alternatives than leaving the Air Force.

019. Family and/or friends openly encourage me to pursue a career in the Air Force.

020. Do you intend to look for civilian employment during the coming year?

1. Very unlikely
2. Somewhat unlikely
3. Don't know
4. Somewhat likely
5. Very likely

THANK YOU FOR YOUR ASSISTANCE

Source: Flores, First Lieutenant Leona. An Investigation of the Process by Which Air Force Enlisted Personnel View and Evaluate Their Perceived Availability of Job Alternatives. MS Thesis. School of Systems and Logistics, Air Force Institute of Technology (AU), Wright-Patterson AFB, OH, Sep 1984 (AD-A147 562).

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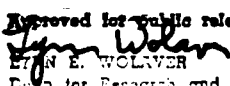
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Captain Peter F. Hoene was born on 19 November, 1957 in Duluth, Minnesota. He graduated from Henry Sibley High School, West St. Paul, Minnesota in 1976, and went on to attend the United States Air Force Academy from which he received the degree of Bachelor of Science in Management in May 1980. Upon graduation, he received a regular commission in the United States Air Force, through the United States Air Force Academy program. He served as the Chief of the Development and Acquisition Division in the Defense Dissemination Program, Space Division, Los Angeles AFS CA, until May 1985, when he entered the School of Systems and Logistics, Air Force Institute of Technology.

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→ There is a void in the empirical turnover literature regarding how the perceptions of alternatives affect the turnover process. In fact, only nine studies to date could be found that tested this relationship. Even though there is a lack of empirical literature on the subject, leading authors feel that the probability of finding an acceptable alternative is one of the key intermediate linkages between affective variables, such as job satisfaction, and turnover behavior.

This thesis continues a longitudinal study comparing the survey responses of 452 Air Force enlisted personnel, surveyed initially by Flores (1984), to reenlistment/separation data collected during May 1986. Reenlistment data were provided by the Military Personnel Center (MPC/DPMATE).

A model was developed that proposed a multivariate view of relations between perceptions of alternative forms of employment and individual's intention to undertake a search for alternative jobs, his/her intention to quit, and his/her actual reenlistment/separation decision. Six hypotheses were developed to test implications of the model. Each hypothesis was supported and several variables entered as significant predictors of reenlistment plans and behavior. ←

The results obtained in this study may bridge the gap in the existing turnover literature concerning the role perceived alternatives play in shaping decisions to remain in or separate from the Air Force. Further, they may guide MPC in the development of policies and procedures designed to retain qualified enlisted personnel.



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